

# NATIONAL ASSEMBLY

## OFFICIAL REPORT

Wednesday, 30<sup>th</sup> September 2015

The House met at 9.30 a.m.

*[The Temporary Deputy Speaker  
(Hon. Cheboi) in the Chair]*

### PRAYERS

**The Temporary Deputy Speaker** (Hon. Cheboi): Hon. Members, it is evident that we do not have a quorum. Therefore, I order the Bell to be rung.

*(The Quorum Bell was rung)*

Order, Members! We now have the requisite quorum. Therefore, we will begin our business.

### BILL

*Second Reading*

THE ENGINEERING TECHNOLOGISTS AND TECHNICIANS BILL

*(Hon. (Ms.) Ngetich on 26.8.2015)*

*(Resumption of Debate interrupted on 26.8.2015)*

**The Temporary Deputy Speaker** (Hon. Cheboi): Hon. Cecilia, you have a balance of 27 minutes but if you can take fewer minutes, more hon. Members will contribute to this particular Bill.

**Hon. (Ms.) Ngetich:** Thank you very much, Hon. Temporary Deputy Speaker.

This Bill provides for the regulation of the practice, as well as the standards, of engineering technologists and technicians. It also provides for the powers, composition and functions of engineering technologists and technicians.

The prevailing situation in Kenya is such that there is no other law or Act that regulates the engineering profession. Many of us are aware that the Engineering Act created the Engineering Board of Kenya, which regulates the engineers. Just for information, it is good to note that the engineering profession is categorized into several cadres.

We have professional engineers such as civil, electrical and mechanical. Then we have the engineering technologists and technicians. We also have a category known as the operators. They are the artisans and the crafts persons.

While engineers, who form a sub-sector of the engineering profession, are regulated through the Engineers Act by the Engineers Board of Kenya, the engineering technologists and technicians remain unregulated and yet, those different cadres work closely together. Just to expound further on how those professions relate to one another, engineers, for example, are designers. They can, for example, design a phone and state its measurements. Then the technologists will come in to put that design into a physical object. When that physical object needs some repair, the technician comes in to repair. So, they work together and they are closely related.

It is also good to note that prior to 2011 before the Engineers Act was repealed, it had a small clause that acknowledged technicians with a Higher National Diploma from Kenya Polytechnic and equivalent institutions. When that Act was amended in 2012, that section was deleted, thus leaving out the engineering technologists and technicians. Therefore, I decided to bring this Bill because as we all know that it is best practice to regulate professional bodies. In Kenya, we have more than 19 professional bodies which have their regulatory bodies.

One reason why we need to regulate professions is to promote public welfare by safeguarding health and property. I want you to reflect on the several scenarios that we have seen. Houses have been collapsing and killing people. Of course, property is being lost. Once the architects have done their work, when it comes to the real building, since the contractor will want to construct at the minimal cost, he will hire those who have learnt masonry and carpentry on the job without necessarily having the requisite professional competences or skills. Therefore, those people do not stick to the standards that are required. When such a building collapses, you cannot sue anyone. The architect will say that he did his part, he drew the design very well and it is up to the person who was constructing.

Secondly, this is also to protect the public from exploitation. Those who are employed in the building industry are really exploited. Graduates from our youth polytechnics and vocational centres will be recognized as having that particular skill and instead of being paid Ksh250 per day, they will get their rightful payment according to the standards that are expected. For example, Kshs1,000 per day as per the regulations.

This also provides for uniformity in content and practice. How will you know the standards that are required if there is no specialised body to determine the standards and the quality of work that is to be done? Therefore, the profession can be regulated if it has a distinct area of practice. In this case, we all know the education system has been reformed. We have two pathways and one can choose to take the academic pathway or the technical education pathway. So, since this has a significant training in education, it looks into the competence of every member before they are registered. That means that if you are looking for a mason or a carpenter, you will be told the kind of qualifications they should have. Professional associations come in to set qualifications and competency standards for its members.

As I speak, comparatively, if we look at the global practice, many countries have adopted this system where the various cadres are registered separately. For example, Canada, United Kingdom, United States of America (USA), Malaysia and South Africa have different registers for engineers, engineering technologists and engineering technicians. For example, Nigeria has a council which is an umbrella body and below it, there are separate regulatory bodies for the separate cadres of engineers.

In Kenya, we have similar situations. I can cite the medical profession which has even gone down to break it further. While in engineering we can term this as regulating the profession,

the medical profession has gone down to regulate the various cadres. This House has passed about seven Bills that have become Acts in the medical profession. We have the Doctors and Dentists Act, the pharmacists, the nurses and every cadre has its regulatory body. Most recently in this House, we passed the Physiotherapists Bill, which was the latest in that medical line. Therefore, this is what this Bill aims to do; to create a regulatory body for the engineering technologists and technicians under that engineering profession.

After the promulgation of our Constitution, several sectors had to re-align their policies particularly in conformity with the Constitution and also with the trends globally. Under the Bill of Rights, Article 21, our Constitution grants the fundamental duty of the State that every State organ should observe, respect, protect, promote and fulfill the rights of fundamental freedoms in the Bill of Rights. The freedom that we are talking about here is such as the freedom of association and the freedom to belong to a particular body like that regulatory body.

In Article 46, the Constitution grants the consumer rights to goods and services. This means that every consumer is entitled to the goods and services that are provided. Therefore, in the education reforms, it has recognised three levels of education. We have basic education which is governed by the Basic Education Act of 2013. We have the Technical and Vocational Education and Training (TVET) and the TVET Act of 2013. Then, we have the Universities Act of 2012. Now this is to emphasise the need to have the TVET focussed on as one of the education reforms. The reason is particularly the TVET. We are talking of education for all. We are also talking about promoting access.

Many a times when the Kenya Certificate of Primary Education (KCPE) results are released, so many join Form One. About a third proceeds to Form One but for the two thirds, one will always ask where exactly they go. Similarly, when they get to Form Four again, about a third joins the universities. You ask yourself: "Where are the other two thirds?" So, the answer here lies on the fact that we have not rightly promoted TVET because parents and students do not quite understand it. It is because we have given it negative publicity. Whenever a student does not qualify to join a university or a secondary school, he or she can be told to join a village polytechnic. The student can feel like this is a place for rejects or for those who cannot proceed. This is very different. TVET allows all to join an institution. It is possible for one to join a technical institution and then proceed to university and even become a professor. It is possible for one to join the youth polytechnic or vocational education and training centres, pursue an artisan's certificate, then a diploma or a degree even up to the PhD level.

For our developing country, this is what we need. We have a very big problem of unemployment. We have a blueprint - Vision 2030 - which talks about innovation and industrialisation. There is no way that we can achieve this if we do not produce the right persons to man our industries. I want to give an example of Malaysia. Malaysia chose to emphasise on TVET. They said: "We are going to specialise on one thing which is making handkerchiefs." They specialised in that. Next, they went to another item. I bet that in Kenya, if we are to be asked what exactly we are specialising in in terms of production, then for sure, we may not identify a single item that can be associated with our country. These days, if you visit any supermarket like Nakumatt, Tuskys or Uchumi, all you will see is imported furniture. What happened to our own local human and physical resources? I remember one time when you needed furniture; you would go to Prisons and purchase very good furniture. These days, even for leather, we export the raw materials and then buy the items expensively. As an example, the paper clips---

**The Temporary Deputy Speaker** (Hon. Cheboi): Order, Hon. Cecilia! You should restrict yourself to the relevance of the Bill. This is your own Bill. Let us not be too general because you will end up losing your colleagues. That is where you get the consultations becoming a little louder. I want you to be specific. Finalise it and then you can have time for the people who are supporting you and your Bill or otherwise. That is my thinking.

**Hon. (Ms.) Ngetich:** Thank you. I stand guided, Hon. Temporary Deputy Speaker. I want to simply say that, as I mentioned earlier, the Bill seeks to have a regulatory body to regulate the engineering technicians and technologists. At the moment, there is no such body. We have had problems even in the courses that are being undertaken at the Technical University of Kenya because once they graduate, they cannot get employment due to that fact that they cannot be recognised because there is no registration body.

Just like any other Bill that forms a regulatory body, the Bill has got sections. One section is for who exactly is to be registered. We still have a step further, during the Third Reading, where we can do amendments. I will call Members to amend such that there are clear roles that will be specific for the engineering technicians and technologists.

Hon. Temporary Deputy Speaker, the Bill also provides for disciplinary action on those professionals who will have flouted the set out standards that are provided. Take for example, the collapsed buildings. If this was done by someone who is already registered, it is very easy to call the person. There are disciplinary procedures that are set out in the Bill on how the registered persons can be disciplined. I have taken more of my time because of the passion that I have on this, but this is not a money Bill. There will be a fee just like any other for those who are registered. That money will be used to run the affairs of the board. Therefore, there should be no fear at all as to whether this is a money Bill or not.

I call upon Members to support this Bill. I considered it good to move with global practice. Once we produce professionals, we are not only producing professionals for our country alone. Sometimes, they seek for jobs outside Kenya. The only way you will convince people who are out there that you are a professional and you know your work is when you are registered with a body that is recognised. So, this is a way of ensuring that the high unemployment rate is minimized. They can work locally or outside the country. The best practice is that all professions should be regulated. This is one of the professions that I am seeking to regulate.

Just as a parting shot, I want to tell Members that we looked at various options of regulating this. As I mentioned earlier, the Engineers Board of Kenya (EBK) does not have the clause for technicians. It was removed. In other countries, they form an umbrella body but they have the various professions under that registered separately. I want to end there because I can see Members need more time to debate this. I also need to hear the views of Members. I want to call upon Members to support the Bill.

I want to end there and call upon the Seconder, hon. Kobado, to second the Bill.

**The Temporary Deputy Speaker** (Hon. Cheboi): Hon. (Ms.) Ngetich, before you are seconded, I want to recognise four members of staff from Nyandarua County Assembly, and five members of staff from the County Assembly of Bungoma. They are seated at the Speaker's Gallery. Feel welcomed to the august House.

Hon. Kobado.

**Hon. Kobado:** Thank you, Hon. Temporary Deputy Speaker, for giving me this opportunity. I want to congratulate my colleague, Hon. (Ms.) Ngetich, for taking a bold step to move this Bill.

Hon. Temporary Deputy Speaker, between Kenya and Vision 2030, stands this Bill. Technology must be embraced because industrialisation must be technology-driven. There are certain elements we must look at before allowing this Bill to go through. It is important to clearly show the difference between engineering and engineering technology. Engineering and engineering technology are separate but very closely related professional areas. The difference between engineering and technology is in the curriculum focus. Engineers are trained to be thinkers, that is, to conceptualise and design, whereas technologists are trained to be deliverers of technology or engineering items. They are trained to have technical skills and to perform the process of creating products. The tangible outcome of an engineer is a design which comes in form of a drawing. The tangible outcome of a technologist or a technician is a physical product and it could be a building, a road, a window or any tangible product of any material. Therefore, those two professions are under the broad professional area called the engineering profession. Therefore, they need to work together.

I want to agree with the Mover that the world has become a global village to the extent that best practices elsewhere are readily adopted. There is no need to reinvent the wheel. If you find that certain practices have been accepted elsewhere, then we should readily adopt them. All we need to do is domesticate them.

Hon. Temporary Deputy Speaker, we need to look at the issue of regulation in this industry. This Bill is coming at a very opportune time when the industry it is supposed to regulate is in crisis. Let us look at the construction and the manufacturing industry. In the construction industry, more than 50,000 buildings in Nairobi had to be demolished for failing to meet the quality standards. This information about those buildings is with the City Hall in Nairobi. They are in areas like Embakasi, Kasarani, Lang'ata and Ruai. When I knew this Bill was coming up, I did a bit of research in this area. A six storey building behind Thika Road collapsed killing seven people and injuring several others. A five storey residential building partly occupied and still under construction collapsed in Kaloleni killing seven people and injuring several others. Another building collapsed in Huruma killing five people and injuring several others. There was also a building that collapsed in Roysambu killing several people. We need to regulate this industry.

The Governor of Nairobi has given an order that all buildings in Nairobi be audited for integrity and quality. Much as they are saying this, who is to blame at the end of the day? As I said earlier, it is the responsibility of the engineer and the architect to think, conceptualise, design, and produce that idea in form of a drawing. The work of an engineer ends there. The person who is supposed to oversee the construction of the building is the technologist assisted by the technicians and artisans at a lower level. Those people need to comply. The architects and the structural engineers should approve the buildings. Once they do so, we need another regulator to see if we are doing the right thing. The developers would want to get their work done at the cheapest possible cost. So, we do not have technicians and technologists constructing buildings. The buildings are constructed by quacks masquerading as engineers, technologists and technicians. We need to clean up the industry. The only way that can be done is by allowing the particular technologists and technicians to regulate their own industry. We can borrow this from other professions as the hon. Member said earlier. The medical profession is well regulated. The

outcome of the medical process is that even as you come in as a sick person, you expect that when you come out as an output, you will come out a healthy person - that is, having recovered your health status. In the medical profession, which is a service industry, we have the nurses playing a role and they have their own regulatory body. We have the Pharmacy and Poisons Act to control those in pharmacy. We also have the Medical Practitioners and Dentist Board Act. All those areas work together to ensure that they provide quality services.

The same thing happens in the engineering field. The engineer would design and hand over to a technologist. The technologist will do his work and hand over to a technician to maintain that product in a particular condition. We need to move. The Government has done quite a lot to ensure this country attains Vision 2030. One area that is experiencing serious shortage is the engineering profession because the United Nations Educational, Scientific and Cultural Organisation (UNESCO) recommends that for a country to develop, there is need to have one engineer serving 2,000 citizens. In this country, we have one engineer serving 6,500 people. In China, one engineer serves 136 people and in Japan, one engineer serves 200 people. In South Africa, there is an engineer serving 2,000 people. So, we are way below - one engineer per 6,500 people. Something needs to be done urgently. The reason we want to pass this Bill is that Kenya is increasingly becoming a dumping ground for sub-standard and low quality products. We are not manufacturing anything. If you look at what happens in the streets in Kenya, you will be shocked. For instance, paper clips which are bent and produced are imported into this country. We are also importing spoons and the other day, we heard of a wheelbarrow costing Kshs109,000! Some of these things can be sorted out locally.

Finally, the Engineers Board of Kenya needs to focus on what they should be doing. Section 7 of the Engineers Act tells them what they should do. They need to establish an engineering school. What they are doing by interfering with the programmes in universities and technical colleges is wrong. The courses in the universities are regulated by the Universities Act. In colleges, the courses are regulated by the Technical Industrial, Vocational and Entrepreneurship (TVET) Act. What the Engineers Board of Kenya needs to do is to establish an engineering school. That is because they are supposed to train professionals and not students in colleges. They are supposed to focus on professionals. You only become a professional after graduating from a university or a college.

With those remarks, I strongly support this Bill. I would like to request and urge my colleagues to support this Bill if, indeed, we want to realise Vision 2030.

**The Temporary Deputy Speaker** (Hon. Cheboi): Okay. Very well Hon. Kobado. I must commend you. You are very relevant in your contributions and also up to date with the news that goes around.

What is it Hon. Omulele?

**Hon. Omulele:** Hon. Temporary Deputy Speaker, having looked at the technical nature of this proposed legislation, the contributions and interests of Members in this House, would I be in order to move a Motion under Standing Order No.97 that we limit the time for each Member to five minutes, instead of the usual 10 minutes?

**The Temporary Deputy Speaker** (Hon. Cheboi): Well, Hon. Omulele, you are perfectly in order but your timing is a little too early. It is not late. It is a little too early. You will allow me to propose the Question and then we will transact yours which is fairly straightforward.

*(Question proposed)*

I will give you an opportunity. I am sure the Members have heard but for the record, you can now canvass your position which we will quickly dispense with.

**Hon. Omulele:** Thank you, Hon. Temporary Deputy Speaker. Having noted that this is a fairly technical kind of proposed legislation and the interest Members have shown in it is little and considering that this is one of the first Motions we are having in this House, would I be in order to move a Motion under Standing Order No.97 that we limit the time for each Member's contribution to five minutes instead of the usual 10?

*(Question, that debating time be reduced to five minutes, put and agreed to)*

**The Temporary Deputy Speaker** (Hon. Cheboi): I would be happy to give an opportunity to the Committee first. I will give the first shot to the Committee before I come to the order I have here. Is that the Departmental Committee on Transport, Public Works and Housing? Okay. Where is the Chair?

**Hon. (Eng.) Mahamud:** Thank you very much, Hon. Temporary Deputy Speaker for giving me this opportunity to contribute to this Bill. This is a very interesting Bill in the sense that it is necessary first, to regulate the activities of technicians and technologists. It is important that those people are recognized and regulated by a regulating body.

It is also interesting because this Bill is also a *replica* of the Engineers Act. It also regulates the engineers body. Reference to engineers in this Bill is actually a complete *replica* of what we have in the other Act.

It is also true that in 2011, the Engineers Act was amended and a new Act was enacted which then removed the provision for registration of technicians. At that time, the provision was for the registration of technicians who were actually holders of diplomas and Higher National Diplomas. Kenya has since then entered another era where we are actually training students and professionals who have got Bachelor of Technology and Bachelor of Technicians degrees which were not there before. So, this is a very important time when the education sector in this country is making some advances in engineering technology.

But first, one thing we want to look at in this particular Bill is this: One would think that the best way to approach this is to amend the Engineers Act and accommodate all the requirements of technologists and technicians. From the submissions you get from various stakeholders, this Bill comes out of frustrations people in the technicians and technologists cadre are facing with the Engineering Board. But must we make laws every time we get frustrations with a particular institution or another body? Is it not the job of this particular House to enact laws that can actually accommodate and harmonize the activities of the sector?

I am a professional engineer. I know the thinking that is behind this and I know the concerns the Board has. But for the interest of this country, it can be best served---

**The Temporary Deputy Speaker** (Hon. Cheboi): You see, I wanted you to limit yourself to the--- I gave you an opportunity as a Committee. Now I can already see you are already giving your personal thinking. I wanted you---

**Hon. (Eng.) Mahamud:** We have looked at this Bill. We had a stakeholders' meeting from the Engineers Board and the institution of technicians. We also met the public. There are various views that were brought to us. What we realized is that every particular body has its own

view on this matter to the extent that you see a lot of disharmony within the professions outside there. So, we in the Committee think that the best way to harmonize this is to amend the Engineers Act 2011 because we are the lawmakers ourselves. It is not the Engineers Board or the technicians that make laws. It is we who make laws. We as Parliament should take over this matter and amend the Engineers Act so that we can accommodate the requirement of the profession in totality. That is the view of this Committee.

If you look at this Bill---

**The Temporary Deputy Speaker** (Hon. Cheboi): Let me ask you as a matter of--- Because, you see, I would not want to give you an opportunity thinking that you are speaking on behalf of the Committee and--- Did you sit as the Committee and decided on this particular matter?

**Hon. (Eng.) Mahamud:** Correct! The report will be tabled this afternoon. So, whereas we would like this, I have a personal view being the Member of Parliament for Mandera West. Allow me to give it. So, what we think is that the current Bill as drafted is trying to regulate people who are qualified. There is no qualification mentioned in this Bill. We do not know who the technicians are in terms of their qualifications. We are trying to register bodies which are professional consulting technicians and not the technicians themselves. So, there are no technicians in this Bill.

Our view as the Committee is that whatever has been put in this Bill can best be served by amending the Engineers Act. But if this House, for its own reasons passes it, it must be properly aligned so that it is consistent with the Engineers Act and consistent with the requirements of the profession.

Further, we do not need to regulate artisans and carpenters. The responsibility of a professional is on the shoulders of the professionals. But this Bill from the Member wants to regulate even the artisans, the carpenters and masons and have them regulated by a body. That is actually going too far.

In this country, as parliamentarians, let us enact laws that can harmonize professions. Reference to the medical profession and the rest does not apply. A doctor is different from a nurse, but an engineer is an engineer. So, we need to have a body that regulates. With due respect to our Member who has moved this Bill, the Committee looked at it. We looked at all the issues. We listened to all stakeholders. The Bill is coming out of frustration because the Engineers Board wants to have its door closed and the other group wants to have its own. We should not have this happen in Kenya. Let us have a law that is actually for everybody.

With those few remarks, I beg to oppose.

**The Temporary Deputy Speaker** (Hon. Cheboi): Let us have the Member for Kitui Central, Hon. Makali Mulu. I will be following the list as the requests are placed. Once in a while, I will also consider other interests.

**Hon. Mulu:** Thank you, Hon. Temporary Deputy Speaker, for giving me the chance to also make my contribution to this Bill. I want to start by first appreciating the efforts by Hon. Cecilia Ngetich. It is quite important because this is a private Member's Bill. Many of us are looking forward to when we will have a Bill like this. She has done a good job. What we need to note is that, as Members of Parliament, we represent the people of Kenya. When a Member presents a Bill like this, I am sure she is talking on behalf of either her own constituency or people who have voted for her in other areas.



This Bill has some important aspects which cannot be ignored. The requirement for a legal framework to regulate the practice and standards of engineering technologists and technicians is quite important. This is because these experts, in their own right, do their work in a very important sector called the construction industry or civil works.

One of the interesting things is that Clauses 15 and 16 stipulate the qualifications which are necessary to be registered under this body, either as a firm or as an individual. That is very important because it will make sure that we do not have quacks in the sector.

The other thing which is important is the provision to register foreigners who also meet such requirements. It is important because in the spirit of co-operation and international relations, we expect our brothers from Tanzania or Uganda might also want to come to Kenya and register to do their work here. Clauses 18 and 19 provide the mechanisms for such registration. That is very important.

In Clause 23, there is the provision of the Registrar keeping a register of those who are qualified and those who have been licensed in the profession. This is quite important. In case anything goes wrong, as it has been said by the Seconder, you have a place you can go and make reference in terms of who was in charge of that project and if need be, then such a person could be deregistered. Clause 42 of this Bill clearly stipulates what disciplinary procedures and measures can be taken against a practitioner in case something goes wrong. So, the Bill has some good things.

However, there are some fundamental issues which I would want Hon. Cecilia to consider as we move forward. Clause 32, which talks about financing of the Board, says:-

“32. The funds of the Board shall consist of—

- (a) donations, grants, loans or gifts made to the Board and---
- (b) such fees, monies and assets---

The body is not going to be funded by the National Treasury or the Consolidated Fund. This being the case, I cannot understand why we have the composition of the Board heavy in terms of the Civil Service. I do not know why you want the membership of a Board which is not funded by the National Treasury to be so heavy in terms of the public service. I would propose that we make this Board completely private so that you do not have to bring the Exchequer here.

The other issue which is important is the matter of parastatal reforms. It is like we are bringing on board an additional parastatal and we know we are undergoing some reforms in the sector. So, you need to also consider that. If you make it independent, then most likely you will have no issues with who will fund it.

Last but not least, is the issue of---

**The Temporary Deputy Speaker** (Hon. Cheboi): Your time is over. I will give the opportunity to Hon. Limo, Member for Kipkelion East.

**Hon. Limo:** Thank you, Hon. Temporary Deputy Speaker, for giving me this opportunity to contribute to this very important Bill. Before I say anything, I have to bring to your attention the worrying trend in this country whereby certain bodies or commissions which are formed by the Government to carry out some functions go ahead and declare some courses or colleges irrelevant, without considering the plight of the students and parents who have invested in those institutions. In fact, this Bill is trying to address a very big issue where the Engineering Act had already excluded some courses which are offered by the Technical University of Kenya (TUK), which has caused a lot of stress to some students. They are watching how this House is going to make this law to make them relevant. I also call upon Members who are either members of the

Engineering Board or practitioners in engineering to guard their interest and face this Bill with an open mind.

What we are enacting here is going to break or make the lives of many students who are studying technology engineering. We have to clearly understand the difference between engineers and technologists. There are a lot of road designs which are made by our engineers. However, those roads can stay for 30 years without being constructed because we do not have people to construct them. We only have designers who design good roads. However, to implement the designs, we have to wait for the Chinese, Italians or Israelis. This country, for a very long time, has not invested heavily on training technologists and technicians to implement the designs. As we deliberate on this Bill, we need to very clearly differentiate between engineers and technologists. We must ensure both are relevant and given a lot of emphasis.

As Members of Parliament, we are emphasising on building technical training institutes in our constituencies. Where will those students go if we do not have a regulatory body? The proposed Board will be self-sustaining. It will not cost an extra shilling to the Government of Kenya. It is going to charge its members and bring order in the management of engineering technologists. So, when I hear some Members opposing it--- I want to call upon the Members to understand the purpose and objective of this Bill so that we support it not because we like it, but because it is important for the prosperity of this country. We are supposed to achieve Vision 2030 when we have enough people who are going to implement all the designs we have.

It is worrying that when we are building, most of the furniture is imported, while we are supposed to make them in this country. If we pass this Bill, it is going to bring standardization. We are going to manufacture most of the materials in Kenya. We are going to industrialise this country just like any other country in the world. So, I want to urge Members: Let us support this Bill to help our students to be relevant. It is going to make technology courses relevant.

Thank you, Hon. Temporary Deputy Speaker. I support.

**The Temporary Deputy Speaker** (Hon. Cheboi): I will give the Floor to the Member for Gatundu North and then I will come to the left and give the Floor to two Members.

**Hon. Njenga:** Thank you, Hon. Temporary Deputy Speaker. I stand to support this Bill. The *prima facie* or major objective has to do with standard controls both in training and performance. I am taking into consideration the fact that Kenya is a developing country and does not have sufficient engineers. There are other global best practises that are compliant with this Bill. Taking the real world situation, what I find is that those technologists are the real workers. Being the real workers, then regulation will be very important. I have also taken into consideration that they are the same people who give “after sales” services. Once a building has been done, you will find the same technicians going back to check it. It is for this reason that there could be a possibility of conflict of interest between the known engineers and the technicians. Once this Bill is passed and the Board is there, then those people will have representation.

I have also seen it in my accounting profession where we have people who did the accountants national certificate of the lower cadre and the Kenya Accounting Technicians Certificate (KATC). The workers are the KATC holders. We, who are like the engineers of accounting, opposed their registration but when we recognised them and amended the Accountants Act, it never worked and today you look for an accountant and not for an accounting technician. In such an important industry such as engineering, that problem will be better addressed with a new law.

I look at the medicine world where Hon. (Dr.) Nyikal can advise me better. I have seen so many other laws all related to medicine concerning nurses, clinical officers, pharmacists and all the others. They work for the same industry. So, I believe that if these laws are worked on well, even in engineering, we can offer services of high quality to our people.

I also look at the shifting of responsibility and liability and the disciplinary measures that are provided by this law. Any time anybody knows that he is under regulation or under check, he becomes more accountable and gives good service. With this Board, disciplinary measures are put in. I have also noted that there is a clause on the determination of fees. Sometimes, fees that are charged by engineers make us run away and do things on our own. You have seen the aftermath is collapsing buildings. So many people have lost their lives. We have lost a lot of economic livelihoods. I know very well that if we come up with a successful regulation of fees, then we can have a negotiating backyard. In law, we have tables that guide us. When you are negotiating with a lawyer, you know where to start. But when you are negotiating with other people, sometimes, you do not know where to start. I like that particular portion that gives us a chance to have the Board check and regulate fees so that our people are not extremely exploited and run away from engineers.

What our country requires now is devolution. We shall require even small counties to have people who can give professional advice. With this Board, we will probably recognise those coming from technical universities and we will have a big choice which can actually make us get the services we need. We cannot just trash away this Bill. We should all support it to make our livelihoods and structures better and to achieve the future our children would like to see. We will feel proud when we will be old to see our country develop and prosper.

I support.

**The Temporary Deputy Speaker** (Hon. Cheboi): Let us have the Member for Kaloleni, Hon. Mwinga.

**Hon. Chea:** Thank you, Hon. Temporary Deputy Speaker, for giving me this opportunity. I must start by saying that I support this Bill. I wish to congratulate the Mover. This morning, we had discussions on buildings that have collapsed and shoddy jobs that have been done in most parts of this country. This is a very worrying trend. The major reason why I support this Bill is this: I sincerely believe that its passage is actually in line with constitutional provisions and, in particular, Article 46 of our Constitution where the question of consumer rights has really been ventilated.

Technologists and technicians offer service to citizens of this country. For the fact that they offer services, then consumers of these services really have a right to have a reasonable quality and they need to be protected. In Clause 42, the Bill has provided for a situation where one can lodge a complaint to the Board. This Board will be in charge of ensuring that the complaints are heard and determined so that certain remedies can be given. I have looked at the kind of remedies and penalties that are available and I think there is one more consideration we need to seriously look at. I imagine of a situation where a building has collapsed. If one is to be charged in court and get fined a certain amount of money for that collapsed building, then I do not think there will be enough compensation for the aggrieved party. The Bill has to be relooked so that we can consider issues of compensation for aggrieved people. What is equally interesting in this Bill are the provisions of Section IV, which mandate the Board to ensure that it develops programmes that are supposed to be taught at our universities. The most interesting thing is that these programmes are supposed to be taught in both public and private universities. So, if the

Board will take charge of those academic programmes right from the initial process, then I am confident that technologists and technicians who graduate from those institutions will not be half baked. Definitely, they will be technologists and technicians that this country can rely on.

Lastly, I wish to speak about the issue of licensing. I realise in this particular Bill that there is need for certain requirements to be made before licensing is granted. In the legal profession, for every subsequent year you want to acquire a practising certificate, you also have to undergo the continuous legal education. In this particular situation, the Bill provides for a situation where you must produce a certificate of continuous professional development in a particular field so that you can get the requisite licence for you to practise and trade. These are very important developments and they are issues that we cannot wish away.

With those remarks, I honestly support this Bill and urge fellow Members to do so. Thank you.

**The Temporary Deputy Speaker** (Hon. Cheboi): I would have given the chance to Hon. Ken Okoth. Unfortunately, I had made a promise that I was going to give the Floor to the left of the Speaker. That is the problem with being a nomad. You are actually almost on top of the list. I am not going to give you the Floor now because you are on the right side which I had not promised. So, I am going to look for somebody who is top on the list here. That is going to be Hon. Nyikal.

**Hon. (Prof.) Nyikal:** Thank you, Hon. Temporary Deputy Speaker. I always stick to my side.

I rise to support this Bill for the simple reason that it actually underlies two very important principles. One principle is the use of science and technology in supporting our life as people.

Different cadres exist in any profession and their roles are complementary. Scientists develop scientific principles and engineers take the scientific principles and design things to help us in our lives. Then the technologists make them. They actually work together. However, it raises the issues whether we want to regulate the profession or the cadres. In this particular sector, the Engineering Act has taken, to a large extent, the regulation of engineers. Therefore, there is a gap for the regulation of the technologists and technicians, which in ideal circumstances, would probably be done together. Experience has shown that whenever you put the various cadres together, there seems to be competition. We have seen that in the medical field and normally there is never cohesion. There is a danger, particularly if you look at areas of registration and practice. You will find that the areas get blurred if things are not done properly.

Our experience in the medical profession is that it is better to get the various cadres properly regulated on their own and have a council that takes care of all. Therefore, this Bill is important. It is going to protect the society. Everybody has talked about the problems that we see in the technology of buildings. I also find it important because it is going to promote professional growth of technologists and technicians.

Right now, some of our children do not even want to be technologists and technicians. They think that these are not registered anywhere and must be a lower cadre. It is extremely important. Therefore, this Bill is necessary at this time. I support it because it gives all the relevance that you need in the regulation of any profession. It has created a Board in Part II. It has also put in place processes of the registration and licensing of people who are going to practice in this area in Parts III and IV. It has gone ahead to also put in place the disciplinary processes and complaints.

Hon. Temporary Deputy Speaker, this is extremely important. However, as one Member has said and this happens, when this situation comes, it is quite easy for one cadre to just take an existing Bill and change the titles as you go along. That is not a reason to reject this and say that we just merely amend it. In the Third Reading, we need to go in carefully and do the appropriate amendments. For example, under definitions, you find the definition of “consulting engineering technologists.” If that definition is not done properly, it will create a lot of conflicts between the engineers and the technologists. That need not be so.

The best way forward, and I would advise the engineering fraternity, is that once this Bill is in place, they should start a process of putting in place a council that will cover each technician under their own regulatory premises. That is what we are trying to do in the medical field and it has been tried in other countries. It works better than having one huge Bill that puts all the cadres in one Act.

**The Temporary Deputy Speaker** (Hon. Cheboi): We will have the Member for Malava.

**Hon. Injendi:** Thank you, Hon. Temporary Deputy Speaker. I want to support this Bill. I particularly want to congratulate Hon. Ngetich for the good work.

First of all, I would like to correct the impression that is being created that without these persons being registered, those who train are half-baked and that is why buildings are collapsing in the country. My experience with construction has been that the engineers, who are few, take these contracts but they recruit these persons who are not recognized in law. They pay these persons very little and when they are doing their work, when it comes to supervision of the work, the engineers who are registered have very little time for supervising this work. Therefore, you find that work that is done is of low quality.

Otherwise, this Bill has come at the right time. Even as we are getting into 2030, these institutions train these persons and because they are not recognised as engineers, they do not access contracts. I sponsored 45 students to train in these colleges, but after they realised that when they get out they will not be recognised, they dropped out of college. If we register them, they will be recruited to construct the buildings that we have seen collapsing and therefore, they will do quality work because they will be paid directly.

As the Chairman has said, this Bill should be in existence and if there are other amendments on the Engineers Act, 2011, we should go ahead with amending it. The Act is inefficient. It talks of persons registering after they have joined another body, which is against the Constitution. So, if they are thinking of amending that Act, they have enough to amend. If this is done, it will happen as it is happening to the legal education Act. My brother was saying that some people are deregistering courses. The fact is that if this body exists in the country, it will ensure that we provide quality education to these persons. There will be a body controlling it.

Let us take the case of South Africa because we are economy No.3 to South Africa after Egypt. South Africa has this developed and we have persons from primary school who take this line of technology, then they get into a technology high school, then a technology college and finally a university of technology. This kind will help to get us into a more developed country as the so-called newly industrialized countries.

I support the Bill and I want to thank Madam Ngetich for committing her time on this. I also know she is doing her PhD. Coupled with her studies, I know she has committed a lot of work into this.

**The Temporary Deputy Speaker** (Hon. Cheboi): Very well, we will have the Member for Nyeri.

**Hon. (Ms.) Kanyua:** Thank you, Hon. Temporary Deputy Speaker. I rise to support the Bill and to really congratulate my colleague and friend, Hon. Cecilia Ngetich, for this particular piece of legislation. It has not been easy. She has conveyed consultative forums and sessions to take Members through the Bill and I really want to congratulate the Member for this step that we are now on.

In the House Business Committee, we have proposed that Private Members who bring legislations like this that cure a legal *lacuna* are invited to the assent session and the pen that the President uses to assent to the Bill is given to the Member like Hon. Cecilia who has brought a legislation like this. More importantly, when awards are being given in this county, Members like Hon. Cecilia are considered for a Moran or a Spear or whichever of the other awards. It is indeed, an innovative law that we are discussing today.

In supporting this Bill and looking at the legal gaps, I have looked at the various elements that the law provides and we do not have any provisions that relate to engineering technologists and technicians in Kenya. The way the country is going now is to professionalise every industry. Every industry needs to be professionalized. Recently, we had an engagement like this when we were professionalising the media and we passed in this Parliament the Media Council of Kenya Act. It is time now to look at the engineering technologists and technicians.

Hon. Temporary Deputy Speaker, in professionalization we cover issues around the board that will be doing the registration. The Bill covers that one. Most importantly, and this is an area of challenge for Hon. Cecilia, the Bill must cover training. You cannot have a profession where training is not defined. One element of a profession is the entry criteria; that entry criteria needs to be detailed. When we were doing the Media Council of Kenya Bill, it was such a challenge because we had comedians who are in the media industry and yet we were trying to professionalise it. So, that issue of training and entry qualifications is critical. With regard to practise and code of conduct those have been well covered.

I agree with the Members who were saying that we do not have enough engineers in Kenya. That is, indeed, true. If you look at the Asian countries and many other countries that are developing, their levels of engineering are very high. Not just the engineers themselves but also the technologists like the ones we are seeking to professionalise today.

Hon. Temporary Deputy Speaker, the country will not attain Vision 2030 by not investing in the technologists like we are seeking to do today. So, even for the reasons that the country needs to develop and grow, then we need legislation like the one we are discussing here this morning.

Let me end with the issue of competition in professions. My own legal profession is another one that loves to close doors. Professions are about closing doors. I do not understand that. There will be no reason, in a country of 42 million, to worry about the number of professionals that we have. In a country of 42 million, we have sufficient market. With the East African Protocol and East African countries we have the other countries like Rwanda, Uganda and Tanzania. So, there is absolutely no reason for the engineers in this country to fear that the doors of competition are going to be opened. We must allow those doors to be opened and every professional is going to compete on merit. Every professional is going to be judged on what they produce for their country. So, for fear of competition by the engineers, I do not think that is sufficient reason for us not to legislate on this law today.

For the universities that are already taking these courses, I think it will be useful for Parliament to pass this law and allow the students who are already in those universities a chance to come and practise the profession that they have been studying. Borrowing from the medical profession also, there would be no reason for the people at the top to fear, say, nurses or the technicians.

Thank you, Hon. Temporary Deputy Speaker. I support the Bill.

**The Temporary Deputy Speaker** (Hon. Cheboi): Very well. Let us have the Member for Luanda.

**Hon. Omulele:** Thank you, Hon. Temporary Deputy Speaker for giving me an opportunity to stand up and support this good Bill.

Looking at the contributions and the sentiments that are coming out from the different sectors that are interested in this proposed legislation, you notice that we stand on the horns of a dilemma because we have on one side the Engineers Act which is in place today and which has supposedly been regulating matters in this industry. Unfortunately, the Engineering Act, as it is today, only recognises three types of engineers and these are the traditional ones, that is, the mechanical, chemical, electrical and the civil engineers. Today we have people who have spent a lot of time studying technology and the world has really moved. We recognise that the world today is a technology-driven world. We have these people who are actually driving all these new innovations in the building, construction and in the general engineering field. Today, in this country, and I speak from a point of knowledge, we have over 600,000 technologists who have no way of recognition and regulation yet these are people who are trained up to university level. Some of them are professors and they are very eloquent in the area that they have specialised in.

I want to stand here and congratulate my sister for coming up with this proposed Bill. It might not be perfect but I think it is our duty as a House to polish it so that we can give these children of this country who have trained in these very innovative ways of taking our country forward recognition and a way to earn their daily bread.

I support this Bill. I know the engineers are falling back on the provisions and the stipulations of the old Engineers Act. That Act has no provision for these people who are necessary for them to practise the engineering profession as they propose to. These technologists and technicians are totally necessary for them to do this. The engineers in their submissions have said that even as they practise, the internationally recognised ratio is that one engineer requires to be assisted by two engineering technologists, four technicians and 16 artisans. Then, you find that these two engineering technologists, four technicians and 16 artisans have no recognition at all in law and there is no way to regulate these people. So, this proposed Bill is clear indication that we need this law like yesterday and not today.

Hon. Temporary Deputy Speaker, I know there will be submissions to the contrary that the world does not recognise these kinds of technologists. There will be arguments that even the legal profession has got people who assist lawyers and advocates in their professions. However, as my sister the Member for Nyeri has stated, the legal profession has really lagged behind because today we have paralegals who also need recognition in the legal profession. That must be done. In England, you will find that the practise of law is actually divided among solicitors, barristers and then we also have the paralegals who are recognised by law and are regulated. So, regulation is the way forward, if we are going to have an ordered society.

For these reasons, I will like to support the efforts that have been made by my sister to bring order in this profession of engineering and in the general industry. I support.

**The Temporary Deputy Speaker** (Hon. Cheboi): Very well. So, we can now have Hon. Okoth whose card is on one side and the heart is on the other.

**Hon. Okoth:** Thank you, Hon. Temporary Deputy Speaker for the opportunity. I rise to support. I begin by bringing to the attention of fellow Members of the House that there is a beautiful article today written by former Permanent Secretary (PS) Bitange Ndemo on the issue of how we need to organise ourselves on this question of engineering and the substance in this Bill that has been well crafted and brought by our colleague, Hon. Cecilia Ngetich.

I serve in the Departmental Committee on Education, Research and Technology. We have looked at this Bill. How I wish the Committee on Transport, Public Works and Housing which claims to be the substantial Committee on this matter availed its Report on time for the Members of the House to debate it. This is because we know this Bill is in the Second Reading. It is not a surprise it will be on the Order Paper. The fact that they have delayed and failed to give us their Report on time--- We got a promise that it would be available in the afternoon, but that will almost be to no purpose because we will not be debating this in the afternoon. I wish we had had that Report earlier.

*[The Temporary Deputy Speaker  
(Hon. Cheboi) left the Chair]*

*[The Temporary Deputy Speaker  
(Hon. (Ms.) Shebesh took the Chair]*

Hon. Temporary Deputy Speaker, what is most important is that right now in Kenya very many young people who are very brilliant, work hard to get grade “A”. They get into universities such as the Masinde Muliro University of Science and Technology (MMUST) and the Technical University of Kenya (TUK) and then turn out to be innocent victims being punished by the Engineers Board of Kenya (EBK) which has selfishly, arrogantly and with utter disregard for the interests of this country made sure that they act as a bottleneck cartel that stops more young professionals coming in and expanding the field in different ways so that our country can achieve Vision 2030. I must honestly say that I am disappointed by the conduct of EBK. We have engaged with them over the last two years and they have done nothing in good faith to show their commitment and interest to advance this field. Instead, they have stymied the interests of young people who want to enter the engineering profession. They have blocked the Ministry of Education, Science and Technology. I wish the Ministry would stand up clearly and help the young people whose parents have paid for them and are helping them to go through education. The young people we are paying fees for through bursaries availed in the Constituencies Development Fund (CDF) to get this education are being stopped from getting it just because of one selfish Board. I wanted to put that on record.

Number two, technologists and technicians work in the engineering field. Their job and role, as you have been told, is different from the job and the role of engineers, which is very important. We need to make sure that we have a clear law that regulates the practice, the qualifications and the disciplinary matters for technologists and technicians separately.

I regret that somebody was saying that carpenters do not need to be regulated, certified or recognised as professionals. The seats that we sit on in this beautiful chamber had to be constructed by carpenters. If carpenters from Kenya can do such professional work, I do not see



why they do not deserve to be certified so they can get contracts, tenders and equivalence internationally so that they can go and do the same work.

We have young people out of this country with the capacity to do technical work. I am proud to boast that my own constituency of Kibra is the home of the best welding and metal fabrication in all of Nairobi County and probably in all of Kenya. If you want good metal work and welding, come to my constituency. These are people who will not show you a document and a paper, but they have the technical capacity and the technology to provide for all the buildings that are being done in Upper Hill. They are constructing some of that work. Let us give them the certification so that they can earn the right amount of money for their qualifications and know the scale of work they can do. We can even develop proper apprenticeship programmes as has been proposed by the Jubilee Government and which I am a proud supporter as a member of Coalition for Reforms and Democracy (CORD). A national apprenticeship scheme could also be included probably for technologists and technicians with different certifications so that we boost these things for the local market and also the international market.

I want to wrap up by saying that those opposing a separate law to regulate technologists and technicians are not sincere. The engineers of Kenya cannot account for the fact that the Standard Gauge Railway (SGR) project is being done by engineers from China and not engineers from Kenya. Thika Highway was built by engineers from China, not engineers from Kenya. Jomo Kenyatta International Airport (JKIA) Terminal which we are proud of was built by foreign engineers, not Kenyan engineers. The Parliament Tower which we will occupy very soon in the coming years is being built by Chinese engineers. It shows that this is a profession that needs to wake, embrace and understand that the role of engineers is not under threat but it will be enhanced by the proper training of the---

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): Thank you, Hon. Okoth. I now give the Floor to Hon. Cyprian Iringo.

**Hon. Kubai Iringo:** Thank you, Hon. Temporary Deputy Speaker for giving me this opportunity to contribute to this Bill. First and foremost, let me take this opportunity to thank my colleague, Hon. Ngetich for coming up with this Bill. I agree that it is well-thought and well researched. It will go a long way in trying to harmonise and also regulate our engineering and technology sector. It will bring in checks and balances into this sector.

In bringing up this Bill, it gives the engineering and technology sector a big boost, in that we would not be getting engineers who, just after graduation from school, go solo and do their own things. They go and start practising on their own. At the end of the day, we end up getting what we would call quack engineers who do shoddy jobs because there is nobody who is there to regulate them. This Bill will bring in a board which will regulate, check and do the balances.

It can also help in protecting young engineers from unscrupulous investors who would sometimes misuse them in getting professional services but they do not pay them well or vice-versa where a job is unprofessionally done. Once the Board starts licensing these professionals, it will be easy to get those engineers who are maybe dormant, who left the country and they just want to come or went to other businesses and they do not practise. Experience makes perfect. Some engineers just go and do other things but when they get a job which they would want to do, they would do it shoddily and that is why we get poor workmanship, which is why we get houses collapsing and killing people. This is very expensive for the country.

Also, there is no way of tracking whoever did it because there is no regular way of getting the person who does it. Once something goes wrong, they go underground and we do not

get them. We have Vision 2030 where we need engineers to do our projects like the Tatu City and the digital cities we are doing, the Standard Gauge Railway (SGR) and the Lamu Port-South Sudan-Ethiopia Transport (LAPSSET) Corridor Project. All these will require engineers. But you find that because we do not have a body which regulates and stipulates who should do this work and what shares the Kenyan market should get or the Kenyan experts should get, we end up importing engineers all the way from China and other countries whereas we have qualified engineers who could be doing this job perfectly and reinvest the same in our country.

In this one, the Board will help develop talents. They can keep track record of the engineers, like they do for doctors. We have doctors who are renowned in this country because they have a board which keeps track of them. They have a board which knows what one is experienced in. You can at least direct the right clients to the right engineers who have already done a job which has already been proved and checked and seen to be satisfactory. As at now, you find that most of the time, once engineers leave school, they just come up and start doing their own work. When you track what that person has been doing, nobody can give you those statistics. We do not have that database for the same, but I believe that Board will also be able to give us this opportunity to get to know exactly who is perfect in this or the other one. Therefore, it will enhance accountability and transparency in this industry.

I support. Thank you.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Gideon Ochanda.

**Hon. Ogolla:** Thank you, Hon. Temporary Deputy Speaker. Let me join my colleagues in congratulating Madam Cecilia for bringing up this Bill. It is very important, in my view.

If you look through the world and if you put aside what we call natural disasters, the rest of the other disasters are related to technology and if you put aside the issues of human error and issues of natural disasters, the rest are technology related. The level at which we individually and generally interface with works and actions of technology is so high to an extent that if you do not get a way of how to regulate this, we are always courting a disaster.

Number one, if you look at this country, there is a point at which the middle level colleges and those colleges that were churning out diploma graduates--- We had a 10-year period that we had basically caused the collapse of the sector. We turned all the middle level colleges into universities.

For purposes of regulating, it is important to check through in terms of training. Who is training them now? You go to every town and in second floors of all buildings there is some kind of a college running some kind of training. The Ministry of Education, Science and Technology does not have a proper and clear way of knowing, registering or seeing exactly who does the training. When everybody is training and training is done by all manner of people, the best way is to have a regulatory body that can easily check this. It is important that we look at it. As at now, we are in the process of rebuilding and coming up with all manner of technical institutes.

I remember in 2013, Canada was looking for just 40 people who had diploma level in plumbing works and this country could not get them

Hon. Temporary Deputy Speaker, the other issue I want to look at is that of the correlation between ethical practices and training, as well as discipline and penalties. There is a correlation in terms of the person to license. Who do you license? You must license somebody from a recognised institution. I have alluded to the fact that some of these institutions, in my view, are not recognisable. You cannot say that they are recognised institutions. Therefore, the

whole issue of licensing becomes very important. That is why the board being created by this Bill is very critical; it will help so much.

On the discipline, you cannot discipline people based on nothing. There has to be a framework of how to discipline anybody in terms of certain behaviour or actions. The issue of penalties is exactly why we might want to revisit the Bill as we move into the next stage of amendments. We might want to enhance some of the penalties and disciplinary arrangement that we have in this Bill with a view to reducing the kind of disasters that we are witnessing in this country.

Regarding the issue of acceptance, we might want to look at the level at which we will be handling the licensing. Is it diploma level or up to artisan level? As Hon. Nyikal alluded, this is something which needs to be looked at very seriously. Who are we talking about? These are deliverers of engineering thoughts and designs. They are a big number, and each of them is claiming to be an engineer. Each one of them is doing all manner of things.

With those remarks, I beg to support the Bill since the regulations are necessary.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Samuel Ndiritu, the Member for Gilgil.

**Hon. Ndiritu:** Thank you, Hon. Temporary Deputy Speaker. May I start by saying that this is a milestone for the technologists and technicians of this country and, indeed, to the entire engineering industry.

I would like to go into a bit of history on how our education system was structured. We used to have the best students going to technical schools, where they would proceed with training until they became graduates with some technical knowledge. They would be very useful in the industries. They used to be what the industries used to call “properly built graduates”. That is because they went through technical schools. They would have a feel of industrial work after completing fourth form and then proceed to the university to become graduates.

Unfortunately, with time, we found ourselves converting technical schools into technical institutes, which we subsequently converted into constituent colleges of universities. Universities found that producing graduates in the core courses of engineering was very expensive. Therefore, they proceeded to produce arts-based courses like Bachelor of Commerce, which are easy to train, and which are commercially viable for institutions.

In the process, we killed the middle-level training. We have recently heard in news that middle-level colleges are not being fully subscribed. We have had colleges like technical institutes not filling up all their places. The reason has been that even those who do artisan and diploma course, proceed and do technology degrees. Some of them have done masters degrees as well as PhD studies and then proceed to lecture in university. However, they are still referred to as quacks. To some people, it does not matter how well trained you are. So long you have gone through the technical line; you remain a quack in your life. Therefore, most students opt to do simple degree courses when they do not make it to university to study technical degrees. We have even found that some courses are not recognised by the engineering registration board. The profession should be regulated. We should not have just anybody coming in.

We have very well trained technicians, but they cannot seek jobs outside Kenya because nobody will recognise them. This Bill does not envisage technicians ever becoming engineers. The Bill is aimed at recognising them for what they are. Engineers will conceptualise designs. Engineers have been talked of as not having been fully built because, unlike in the past, where they would have background of technical schools, we want them to become technicians and

engineers. An engineer designs a component and then we expect him to follow it up to the production. That is not the work of an engineer. If that has been the basis on which the industries have been saying that we have been producing half-baked engineers, it is wrong. The work of an engineer is to conceptualise a design and pass it on to the person who produces it. The production is done by technicians and technologists.

The building industry is a safety industry. I want to give a case study of collapsing buildings. In the health industry, we have a doctor, an anaesthetist, a radiographer *et cetera*. Each of these professionals has a responsibility. In the construction sector, engineers do good designs. Contractors do what they do. There is no law by which to hold technicians responsible even when they mess up. So, we end up chasing the---

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): Hon. Ndiritu, your time is up.

Yes, Hon. Chris Wamalwa.

**Hon. Wakhungu:** Thank you, Hon. Temporary Deputy Speaker. I rise to support the Bill even though there are some reservations which I will mention. I would like to thank Hon. Cecilia Ngetich for a job well done. Coming up with a Bill is not easy. It involves doing research and a lot of other work.

It is indeed true that we do not have any legislation that guides technologists in this country. However, in this Bill, we need to have a clear definition of “technologists”. We do not want to open a Pandora’s box. We need to have a clear demarcation between engineers and other people, just like in other professions. In the medical profession, we have gynaecologist, surgeons and nurses, among other professions. Each specialist has a clear role. You will not see a nurse purporting to do the work of a surgeon. In this case, if we have a clear demarcation of roles of the various specialists, we will not end up with opening a Pandora’s box.

It is, indeed, true that there has been a gap. Some of the technologists are the ones doing most of the work. We still have a shortage of engineers in this country but the critical issue: What are the clear qualifications of technologists? We need to know. Is it a diploma, a higher diploma or a certificate? Which institutions of learning must they go through? They must go through accreditation. We know very well that there are so many colleges on the streets of Nairobi. Some colleges on Nairobi’s River Road and elsewhere in Kenya claim to be training engineers when we know that the difference between genuine engineering training and other technical training is like life and death. Many buildings are collapsing. Accrediting somebody who has not gone through proper training and giving him engineering design work is exposing people to a big risk. We must do opportunity cost and have a clear mandate for each category of specialists.

I have consulted some engineers, like my friend, Hon. Gumbo, who is part of the engineer’s body. He told me that a lot of the sections of this Bill have been borrowed from the Engineers Act. Wherever the word “engineer” appears, it has been substituted with “technologist”. That is wrong. We need to put it more clearly to suite the situation at hand because technologists have different specialities. In engineering, we have civil, mechanical and electrical engineers, and what have you. When it comes to technologists, what criteria of specialities are there? You will have a plumber calling himself an engineer.

You will find plumbers, metal fabricators, or even carpenters calling themselves engineers. Whatever it is, this is the clarity that we want. That clarity must be there so that we avoid getting into trouble. There should also be clear definitions and qualifications; if it is a diploma or a higher national diploma and from which colleges. There are so many colleges

mushrooming out there also purporting to offer engineering courses. Once that clarity is there, this Bill will be a very nice Bill. It will help in as far as building infrastructure and achieving Vision 2030 is concerned. But later on, when it comes to the issue of composition of the Board, it is true the issue of regulation is critical. The practice worldwide is that professionals regulate themselves.

On the issue of fines, I went through it, and I realized that the fines were a bit lenient. Hon. Cecilia, as we move to the Committee of the whole House, we can do amendments on the issue of fines. We have seen many buildings collapsing. If we put a fine of Ksh250,000 it does not augur well. We, therefore, need to have high penalties for purposes of reducing those occurrences.

Otherwise, the Bill is good. I support it. When it comes to the Committee of the whole House, we will sit down together as a House and bring amendments and align them to the real practice.

I thank you.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Mary Emaase.

**Hon. (Ms.) Otucho:** Thank you, Hon. Temporary Deputy Speaker for this opportunity. I wish to join my colleagues and congratulate my friend Hon. Cecilia for this Bill which is very important for the future of this nation.

This is an area that has been forgotten. I am surprised listening to the engineers in the House. I wonder whether they are sincere with their sentiments. If the commitment and the goodwill was there to accommodate the technologists and the technicians, they would not have removed the only clause that was attempting to accommodate the technologists and the technicians in the Engineering Act of 2012. I, therefore, want to congratulate Hon. Cecilia for addressing that lacuna because as we are all aware, when you open a newspaper, you will read that a house has collapsed somewhere. We have quacks in the industry. The industry needs to be regulated.

Secondly, this country is growing. We must agree it is not easy to grow a nation to a developed and a prosperous one. It takes ages to grow a nation. For those nations that have developed, they have had to develop science and technology. When we look at nations like Switzerland and Germany, you will find that 40 to 70 per cent of their post high school degrees are in the technical field. So, as we embark on building the TVETs and technical universities, it is important that we give Kenyans confidence.

We were sharing with the principal of Technical University and what came out is, they are not even able to get sufficient applicants for the establishment that they have been given as a university. There is a lot of negativity out there, yet we know today there are so many respectable, well compensated, upwardly mobile careers that our young people can engage in if only this profession can be recognized, given the legal standing that it requires, credibility and then Kenyans begin to believe in education. This is a very important Bill.

When you look at this nation, there is so much unemployment among our young people. The reason is because they graduate from high school with no sufficient skills to enter the workforce. If they choose not to go to college or they are not able to join colleges, they cannot be able to--- Most employers are looking for people who are hands on. That is where we are moving towards. We are moving towards industrialization. So, this profession needs to be appreciated, recognized and regulated. That is why I support this Bill by Hon. Cecilia.

The Engineers Act that is being proposed for amendment compared to the other one, this has a more holistic approach. It attempts to accommodate all these professions. Maybe engineers should be included in this particular Bill, so that they can accommodate engineers, technologists and the technicians. But I want to say that we need to support this Bill, because this is the Bill that is going to make this country achieve Vision 2030. This is the Bill that is going to address poverty in this country. The gap between the rich and the poor is widening every day. The world today is becoming like a global village as a result of globalization. We must embrace technology so that we can equip our young people and create the much needed employment as well as having the ability to employ themselves. But if there is no confidence and regulation and the profession is not recognized we cannot achieve our Vision 2030.

I support this Bill and I want to appeal to all hon. Members in the House, to do so.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Onyura.

**Hon. Onyura:** Thank you very much, Hon. Temporary Deputy Speaker for giving me the opportunity. Right away, I want to say that I support this Bill. This Bill is very timely. In fact, I wonder how we have managed to do without such a Bill for this long. But as they say, better late than never. I support the Bill strongly because it provides a legal framework for the regulation and practice by the technologists and technicians. This is very important. This is a cadre that is important and increasingly as we have these projects in our devolved system of Government where all funds now have gone to the counties, we will need this cadre very much.

Hon. Temporary Deputy Speaker, it is very important for a cadre that plays such an important role to be well regulated. I also notice that the Bill provides for a Board and gives it full mandate and enough powers for them to ensure that the standards are maintained starting from training. I would imagine that when it comes to the issues of curriculum, the Board and other professionals in this area will be fully involved to avoid some of the situations that we have found some of our colleges in; arguments and disagreements over the kind of curriculum that is being followed. The issue of training and issues of performance and services---

I am happy to note that in the Bill, the Board is given those powers fully. It is also encouraging to see that the Bill provides for registration and provides that anybody who is practising and is not registered is in fact committing an offence. So, the issue of proper registration and providing the criteria to be eligible for registration is provided for very well in the Bill and it will just enhance not only professionalism of this cadre, but also ensure that this level of people are well recognized and they can give their services as expected.

Hon. Temporary Deputy Speaker, I have also noticed that the Bill encourages continuous professional development in terms of training, acquisition of skills and acquisition of experience. This is very important, not just for this particular cadre of professionals, but all professionals. There is always need for continuous improvement. I would also like to urge that we need to invest in the technical schools or colleges that offer these technical skills. I have in mind areas like the youth polytechnics and that level of institutions that provide these skills.

With those remarks, I beg to support.

**Hon. Tong'i:** Hon. Temporary Deputy Speaker, thank you for the opportunity to also contribute to this good Bill. On the outset, I want to thank the Hon. Member for a job well done. This is a group of Kenyans who are professional and we have ignored them for so many years. If you look at developed economies like America and Britain, only 20 per cent of the population goes through universities. So how can a country such as ours which is poorer ignore such a huge

group which comprises what has made America what it is today from a body that organizes them to ensure that we get value for money?

Just for purposes of record, engineering technology is an arm of engineering profession that uses mathematics and natural science gained by way of higher education, experience and practice. The energy and knowledge is devoted to advance the benefits of human needs and that is what engineers are doing. The difference between them and engineers is that engineers sit in the office and assign them field work. Hardly will you get an engineer doing wiring in your house. Most of the times you will get a technologist doing what an engineer has designed and it works for Kenyans.

The requirement world over is that a technology which touches on people's lives must be regulated because it touches on the safety and health of humanity. It touches on the public and it is only fair that this profession is controlled through an Act of Parliament. That is the practice the world over. When that is done, we are going to achieve several things. First, we will ensure that there is discipline in the industry and that the people who are going to be under this body will be answerable to the body's acts and regulations. That way, we will get them tamed because sometimes we have had people who are not professionals, in that sense of technologists who purport to be so but end up doing shoddy jobs to the detriment of this economy, families and the health of the nation. If we can have a body, I am sure we will have addressed that concern.

Secondly, this will support the Government to achieve its Vision 2030. How are we going to achieve this vision if 90 per cent of our population is ignored? This is 90 per cent of the population that we depend on yet we ignore it. It may even be 99 per cent because my little knowledge of statistics could be wrong but it says that we only have 1 per cent of engineers in Kenya. Of the population of Kenya, not even 1 per cent is engineers. How can a small percentage be depended upon by everybody else in the country to ensure that we are going to get what we need to drive this economy to what it should be, the middle income economy of this country? Therefore, this body will come in handy to ensure that this happens.

Hon. Temporary Deputy Speaker, thirdly, which is also very important, is that this body will ensure that we address the issues of unemployment. If you look at construction in the country today, the Chinese who are coming to Kenya are not engineers but out of necessity, technologists from their country come to supervise the roads and they have done a wonderful job. Look at the Thika Highway and the other roads they have done, look at the University of Nairobi! They are doing one of the biggest buildings in the country and it is being managed by technologists from China. What is so wrong for us to have our own to manage what the Chinese have done? You are only a fool who wants to run away from his mistakes. We all need to learn from what has worked for other communities, copy and paste to the Kenyan situation.

I support this Bill. I think it is coming in at the apt time. It is going to make a difference in people's lives and it is going to ensure that we encourage our youth who have always looked down upon these opportunities as a noble cause because even medicine has managed its people. We should also do the same in this industry.

With those few remarks, I support.

**Hon. (Eng.) Gumbo:** Thank you, Hon. Temporary Deputy Speaker, for giving me this opportunity. I want to start from the outset by saying that as a professional engineer, I cannot support this Bill in its current form. But before I say that, let me correct the misinformation that is being peddled by hon. Members here. I have heard a Member saying that the Engineers Board of Kenya (EBK) is selfish and arrogant. I think that is disheartening because it is dishonest to

claim to be an expert on something you do not know anything about. If we are to progress, we have to respect professional bodies. Disrespect for professional bodies is what will give this country the Dr. Mugos who essentially are nothing but pathetic quacks and masqueraders.

As Members debate, it is also important to get a background into the things that we say here. I have heard it said that this Bill will give people skills. How does an Act of Parliament or a Bill for that matter give people skills? Skills are found in training institutions. An Act of Parliament is not a training institution. I have heard people who I used to think are very informed saying that this Bill will transform technologists into engineers. It cannot be true. The training curriculum for technologists and engineers is so different. It is the same way you are saying that you come here, make law which will transform nurses into doctors. It is not the work of Parliament to make laws to transform nurses into doctors. If we are going to help, I know that we need to regulate technicians and technologist but the way to do it is not through dishonesty. The way to do it is not through populism. We are not going to come here and make populist statements saying that we are helping our people and we are creating employment. How are you going to do that? Let us respect our professional bodies. Engineers and technologists go through entirely different training programmes. We are not going to stand here and start saying that we do not see the difference between Eng. Mahamud and somebody who has done carpentry or plumbing and drainage. What are we talking about? There is a big difference. You are not going to tell me that my friend, Hon. Kang'ata, is no different from a clerk whose work is to move files from one court to another. This is wrong. It is dishonest.

I want to tell those people who are being passionate to be passionate but to please be on the side of facts. Yes, it is true that the work of technicians and technologists needs to be regulated but the way to do it is not through plagiarism. The way to do it is not through copying and pasting an existing law. This is what we are complaining about. I have no apologies to make for anybody who wants to say that I am arrogant. I am not arrogant. I am an engineer, as qualified as any engineer in this country. I am not arrogant. It is something that my good friend, Hon. (Eng.) Mahamud and I have earned. Let us create space for these people but let us not do it in a way that tries to trash the profession of engineering.

Kenyan engineers are some of the most qualified engineers. I have heard people unknowingly saying here that Thika Road was constructed by Chinese engineers. They do not even know that the designer for that road is my good friend, Eng. Matu, a Kenyan. We should be celebrated. Why are you celebrating the Chinese? It was designed by Eng. Matu. When did he become a Chinese? I was with Eng. Matu yesterday and he does not look like a Chinese. People are coming here with very sentimental statements. Are you going to have somebody who has gone to the Nairobi Aviation College to design Thika road?

Please, let us make laws that will move this country forward. Let us not make laws through sentimentalism, lies and by trying to abuse professions that have taken Kenya forward. My good friends and I, the engineers in this House, will be proposing amendments. I have told my good friend, Hon. Cecilia Ngetich to respect us. I will not purport to be a teacher because I am not trained to be a teacher. Respect us so that we help you to help these people, but not through lies and misinformation.

I oppose.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Julius Melly.



**Hon. Melly:** Thank you, Hon. Temporary Deputy Speaker. I rise to support this Bill after Hon. (Eng.) Gumbo. When you look at the engineering profession, Sessional Paper No.12 of 2012 divides the field into engineering, engineering technologists, technicians and operators.

As a progressive nation, we are supposed to have Bills that are going to move the nation forward. We are not going to have Bills and Acts that are going to protect toughs; what engineers are doing currently. If you look at progressive nations that have developed in terms of technology such as the South East Asia nations, most of them have regulated the engineers' technology. We are not disputing, engaging or going to the field of the engineers. The engineers are the dreamers and the designers, the technologists are the implementers and the technicians are the maintainers.

If you look at our country today, we have emerging fields in science and technology. When you look at the field of Computer Science, we have computer engineering, aviation engineering, energy engineering and many others. This Bill is going to ensure that these new fields are catered for. We have instances where constructions have been done in this country. New high-rise buildings come up and collapse. Whenever you go to the field to find out who is to blame, you find that the engineer did his work very well. He did the measurements, the design and everything, but the technologists, the implementers or the person on the spot has not done his work yet he is not regulated.

As I speak, we have over 20,000 engineering technologists who are not registered in this country. They are not regulated and so, they cannot be disciplined. They cannot be taken into account. Who is going to do this if we have no law to ensure that they are regulated and are responsible for their deeds?

Every time we hear the urban authorities saying that they want to see the engineer who did the design. On the ground, we have individuals who have done the mess, but they will always hide at the back of the engineer. If our economy is to thrive, we must include individuals from the emerging fields. We have a good number of technologists. Other professions, for instance, the medical profession, the doctors and the nurses are being regulated. What is very special with the engineers' profession? They have only recognised the traditional areas like the Civil and Mechanical Engineering. I also want to point out that this Bill is going to ensure that the health and safety standards are put in place and catered for.

In developed countries, we have international accords that recognise technologists and technicians. We have the Washington Accord, the Sydney Accord and the Dublin Accord. These people have been recognised in other parts of the world. We cannot be an exception. We cannot fail to look at what others have done and have done it well.

I support the Bill. It is very important and it is going to stabilise the unrest that we have in the universities today. Some of the problems that we have in our universities today and our graduates are not being recognised is because we lack a regulator.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): Hon. Melly, your time is up. I give the Floor to Hon. Susan Chebet.

**Hon. (Ms.) Chebet:** Thank you, Hon. Temporary Deputy Speaker, for giving me this opportunity to contribute to this Bill. From the onset, I would like to appreciate Hon. Cecilia Ngetich for bringing up this Bill. It is long overdue. Technicians and technologists in this country have been working without a body to regulate their activities. This Bill will give us a body that will regulate the operations of the technicians and technologists, so that we can know their number in the country and their qualifications. We can also hold them responsible in case of

safety problems like the ones we experience in Kenya when houses collapse in urban areas. When this happens, nobody takes responsibility. With a body like this, we are able to hold the technologists and the technicians responsible for such occurrences.

Engineers should not fear this Authority. We are not interfering with their work in terms of design. They design and the technologists and technicians implement the designs. The technologists and technicians who are trained should be certified, so that they can participate in the construction of the Standard Gauge Railway (SGR), so that when the Chinese leave the country, they can maintain our railway lines.

Secondly, the Bill has come at the right time when Kenya is working towards the Vision 2030. As we work towards that, we need to have technical support from our technicians and technologists. The Government has put a lot of money in our counties and constituencies, so that we can have technical institutes to produce technicians and technologists. If we do not have an Authority to regulate the graduates from those institutions, it is going to be a big problem. This Bill has come at the right time, so that the public can be assured that when they send their children to learn in technical institutions, they will get employment at the end. At the moment, it is very hard for this cadre of technicians and technologists to get employment in the country because they do not have a regulatory body that can certify their certificates.

We have a case which has been circulated. There is a young man called Mr. Boas Muiya. He did his course at the Technical University of Kenya. In his fifth year, he could not continue because he did not see the future of that course and the university is no longer taking students of that category. If a student or students lose five years of their lives in a situation like that, then it means that that course will never be taken by Kenyans. Kenyans will lag behind even as we compare ourselves with other countries. If we measure our standards, we will always lag behind because for every engineer that we have, we need 22 people who have technical knowledge to assist them.

Finally, I want to appeal to this authority when it is established to have apprenticeship skills recognised and certified, so that the many Kenyans who have done those courses even outside college can be---

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Ferdinard Wanyonyi.

**Hon. F.K. Wanyonyi:** Hon. Temporary Deputy Speaker, I wanted to make my presentation when Hon. Gumbo was here but he has disappeared. Hon. (Eng.) Mahamud has also disappeared. I think there is a misunderstanding of the context of this Bill. I want to thank Hon. Cecilia for having brought this Bill, because all Kenyans know what is happening. The Bill is very clear. I wish Hon. (Eng.) Gumbo was here with his arrogance. To tell us that we do not know the difference between “technology” and “engineering” is an abuse to this House and to the Member of Parliament as it means she did not know what she was doing. I am sure that she has done a very good job to come up with a Bill like this. I had wished to have him here but he has gone.

The Bill is very clear. First of all, it is issuing the licences to qualified persons. I do not know whether they have read that or not. We know that there is a difference between a technician and an engineer. We know the difference between a nurse and a doctor. We know that. We have had cases and this is very clear. She has said that this Board will even enter premises and sites. Sometimes we have cases like in Kiambu where the other day a whole building came down. Now, we have at least recourse. We will be able to get somebody to know

what is happening. We have heard cases even in Mecca where a crane collapsed, because of lack of what we are talking about. So, this Bill is quite timely. I want to urge this House to back this, so that we get recourse in case of a problem.

I have had a case of a student who has done an engineering course somewhere. You and I read papers about four or five months ago about failure by some people to recognise those courses yet they are engineering courses. That is why Hon. Cecilia has come up with this; we know that the board will participate, or take part, in formulation of the courses at the Masinde Muliro University of Science and Technology, Kenyatta University or the University of Nairobi. They will come up and see that the courses that are being taught to our children are those that can assist them.

We have had cases of a course called environmental engineering. Students who have taken this course cannot be employed anywhere in this country. We know this. I know of two students who did that course. They are looking for jobs. When they get to a place they are told: "Your degree is not recognised because it did not go through whatever it is supposed to be." Somebody says: "We know this is an engineer. I know you can do a doctorate course and whatever, but we have a difference between an engineer and a technologist".

We have had cases of bridges in my place where a quack says he is an engineer. He is given a tender and it goes through. He goes there and erects a footpath and not a bridge. Two weeks after that footpath started cracking. What did I do? I went to the regional engineer in Trans Nzoia. He asked: "Why did you give this work to this man when he is not qualified?" This Bill will bring some sense and professionalism in the whole exercise; it says that they will face some disciplinary measures.

As I finish, we should pass this Bill because it brings some discipline in that profession. I want to thank Hon. Cecilia for coming up with this. Let us support this Bill because it is going to bring professionalism to our dealings. I support. Thank you.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Christine Ombaka.

**Hon. (Ms.) Ombaka:** Thank you, Hon. Temporary Deputy Speaker, for giving me this opportunity to contribute. First, let me congratulate my colleague, Hon. Cecilia Ngetich for this Bill. Time has come for us to look at becoming an industrialised nation. That has been sung all over. Everybody talks about Vision 2030, and how Kenya is moving towards industrialisation. This is one of the processes that must be considered. This Bill, therefore, comes at the right time.

We know that we have had institutes of technology. There was a time in the 1970s and 1980s when the whole country was doing *Harambees* for institutes of technology. We were going to have students going to study artisan courses which were then missing. Then, we had so many of them and at a certain point, artisans disappeared. We do not see many of them. Nobody is going for this training; if they do, they are not recognised.

As it has already been said, a number of artisans, or technologists, who have existed in this country have suffered in terms of recognition. There are no standards set. There is no recognition. There is a lot of discrimination. So, many young people no longer want to go for studies in the area of artisanry, or technologists, because jobs are also not there.

The people who have dominated this area of profession have been those top notch engineers who are produced in the universities. This is the group that *Mhe*. Gumbo was talking about. These are specialists. The engineers who graduated from university are good but they are high level. They are mainstream engineers. There are engineers of technology, civil engineers

and electrical engineers. They are top notch but they always work together with artisans. They have been consultants. They construct but they do not do the work on the ground. They employ artisans to help them. They work together as a team. I do not see why we should now discriminate, so much that we do not allow them to also have a body that can regulate their work. Many of them are not regulated. They are also messing up. That is why there are many accidents.

When I was building my house, I did not use top notch constructors. I used these middle level ones. They did a perfect job but if there were to be a problem in that house, I would not sue the person, or demand my rights as somebody whose work has been messed up. The board is going to regulate this group of people that has been neglected for a long time. We will be able to inspect their work, regulate it and say that these are young people who are getting jobs because they are now professionally recognised. A body such as this is good enough for them because it will make them more professional. All the professions in this country, or all over the world, have middle level professionals in their areas; we have cited doctors here. You have a surgeon and then you have those who are technologists dealing with medical issues at a lower level. Then, you have much lower ones. Community nurses are also there and they are all recognised as medical professionals.

Hon. Temporary Deputy Speaker, the same applies to teachers where we have early childhood development (ECD) teachers, primary school teachers, secondary school teachers, college level teachers, and university teachers. They are all recognised as teachers and have professional bodies. That is why it is necessary for the low level technologists and artisans to be recognised within a body proposed in this Bill. I support this Bill because people who belong to the body referred to here are Kenyans whose professions must be recognised even at their level of education.

I would like to thank Hon. Cecilia because this Bill has come at a time when Kenya is moving towards industrialisation. To be industrialised, we need to consider the role of technologists and technicians.

Thank you, Hon. Temporary Deputy Speaker.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I will now give the Floor to Hon. Anna Nyokabi.

**Hon. (Ms.) Gathecha:** Thank you, Hon. Temporary Deputy Speaker. I rise to support the Engineering Technologists and Technicians Bill presented by Hon. (Ms.) Cecilia Ngetich. I would like to thank her for taking such a great step forward in this country with 11 million unemployed youth, who need something to do. It is important that we regulate that industry. It is the industry that carries the majority of the youth and people engaged in construction in this country. They are people who will not necessarily find formal employment in offices, or have opportunities to better their lives. The enactment of this Bill will ensure there is regulation in this industry. Currently, those who graduate from technical, industrial, vocational and entrepreneurship (TVET) schools in carpentry, masonry, plumbing and other skills are desperately needed in this country. In my county, the area of construction is, probably, our largest occupation that will help us employ many people.

The majority of our people are not skilled and do not have papers. Most of these people end up being paid Kshs200 per day whereas anybody with a TVET certificate earns between Kshs1,500 and Kshs2,000 per day. This Bill will not only ensure that at least standards within industry are regularised and harmonised but will also ensure that colleges offering these courses use one curriculum that will apply to all people throughout the country. We can only say that it is

one of the best things that will happen in this country. We are a developing country; we are viewed as one of the top countries in Africa in terms of industrialization, and so we must ensure that we have a regulatory body. If you look at most of the areas where construction is taking place, buildings are falling down. Why is that the case? There is nobody to question the contractor on the materials used and anything to do with standardization. This is because we do not have a body that should ensure that high standards are attained. It is selfish of the Engineers Regulatory Authority (ERA) to say that we have 28,000 engineers in this country who are not regularised. If they were honest they would tell us that we only have 1,500 engineers who have certification. It is a big shame considering that our population is moving towards the 50 million people mark; they want to continue holding on to this industry and keeping other people out for their own selfishness. We must bring everybody on board and regulate areas that are going to participate in the growth and development of this country. We need to ensure that the youth of this country are employed. That is how we will create opportunities for all.

I support this Bill and thank Hon. Cecilia for bringing it forth. It is a testament that women in this country, especially women Members of Parliament, are contributing significantly to the growth and development of this country.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): Hon. Nakara.

**Hon. Nakara:** Thank you, Hon. Temporary Deputy Speaker. I rise to support this Bill but I want us to take into consideration what Hon Eng. Gumbo presented before us, so that we do not engage in another war outside this House. We have some engineers here who can guide this Bill, so that it is what we want it to be.

We need this Bill to go through. We need to have in place standards that are acceptable nationally and internationally. We have many technologists and technicians and we need to export them to other countries. Therefore, we need the courses to be offered recognised internationally, so that we can export our technologists and technicians to other countries. The curriculum that is going to guide technologists and technicians must be approved by the existing body that is experienced, for example the Engineers Registration Board (ERB) and others. As we guide young technologists and technicians they need to understand what they are going to do in their institutions.

Hon. Temporary Deputy Speaker, the institutions that are going to train these people must be registered. This is because there are institutions that are offering these courses yet they do not have the machinery and tools for practical lessons. As much as we need this Bill to go through, we need these young men to be trained. We must ensure that the institutions we are going to give the opportunity to train young men are registered and that they have all the requisite machinery. I am happy that this Bill establishes the Board which is going to ensure that the institutions to offer these courses have all the machinery that is required.

Hon. Temporary Deputy Speaker, there are some students who sat for the Kenya Certificate of Secondary Education (KCSE) examination but missed a mark to join the university and enroll for an engineering course. So that we do not lose such brains, we need to have institutions which these students can join and grow to join bigger institutions. Some have the desire to be engineers but by bad luck they missed one mark to get admitted to university. We must appreciate that they have the desire and knowledge to be engineers. We need to have colleges that can upgrade students who have potential to be engineers.

Technicians and technologists can be self-employed. If you go to the villages, many guys who do small jobs are the ones who went to polytechnics and became carpenters, plumbers and

masonries. They now earn some money every day in the villages. After we produce the technologists and technicians we do not want them to compete with the engineers. We want them to be self-reliant. They need to create job opportunities for themselves and for their survival.

We now have devolution and 47 counties in this country which need that kind of knowledge. We have very few engineers in this country, who are recognised and trained very well. We need to encourage them to train more technologists and technicians to go to the county level for employment. There are many job opportunities in the counties available for the technologists and technicians. For us to grow our counties, we need to have these people available to do smaller jobs where a lot of engineering knowledge is not needed.

I support the Bill.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I will now give the Floor to Hon. (Ms.) Mishi Juma.

**Hon. (Ms.) Khamisi:** Thank you, Hon. Temporary Deputy Speaker for giving me this opportunity. First, I want to support and congratulate my sister Cecilia for coming up with this Bill. This Bill has come at a good time. In this country, we have about six laws on medical practitioners; they talk about nurses, clinical officers, pharmacists and even dentists.

I do not see anything wrong in having another regulatory body in the engineering profession. Kenya will not be the only country which has come up with two regulatory bodies in the engineering profession. We have other countries like Canada, Malaysia and USA, which have two regulatory bodies. We just need to have this other body, so that we ensure that the other cadre of people who have not been recognised by the ERB are recognised.

In our country right now, we have about 26,000 engineers. Only 2,000 have been registered by the ERB. This is something which we cannot accept at all. In our country where we depend mainly on the informal sector, we have about 600,000 technologists, technicians, craftsmen and even artisans. But this group of people is not recognised.

The ERB has just recognised a few people in the engineering profession, and left out the rest of the people with all their professional qualifications. I know that there was an attempt to amend the Engineers Act 2011 to ensure that it accommodated other cadre of people, but there was a lot of hostility to the extent that engineers have called technologists spanner boys. This is not something we cannot agree on, or even accept. Be they called “spanner boys” or by any other name, they are Kenyans, have undergone professional training and have to be recognised.

Section 6A(3) of the Engineers Act, 2011 contravenes Chapter Four of the Constitution of Kenya and the Bill Rights. It states that one has to be a corporate member of the Institution of Engineers of Kenya (IEK). You have to be a corporate member for you to be recognised by the Engineers Registration Board (ERB). But the Constitution says that one should not be forced to be a member of a club or an organisation without his or her consent.

We need to say that for you to be forced into a private club so that you can be recognised is unconstitutional. That is why we are saying that we need to have another regulatory body. Also in the Engineers Act, they also say that you cannot refer to yourself as an engineer, or engineers, if you are not a corporate member, or are registered with the ERB. We have so many graduate engineers right now but they cannot call themselves so because this Act is really bad, biased and discriminatory. We need to support this Bill so that the majority of technologists, technicians and artisans have their rights protected.

The ERB or the engineers who have been registered with it are not sincere in saying that they want to have an amendment, so that they can accommodate the rest of the cadres. They also

removed Section 11(5) from the Engineers Act, 2011. For them to be sincere they should even say that we also need to have technicians, the craftsmen and even artisans. They removed that section and showed that they were not sincere. That is why I advocate that we have another body to regulate the engineering profession.

I know the ERB is part of the East Africa Community (EAC), and there is a mutual recognition agreement. If you are an engineer in Kenya you are recognized in Tanzania, Uganda and other countries in the East Africa Community. We also need technologists, technicians and artisans also to be recognised in the EAC and also globally. For them to be recognised, we need to have a body which will recognise all of them. After that we can also come up with an agreement to also make them part and parcel of the EAC.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Naomi Shaban.

**Hon. (Dr.) Shaban:** Thank you, Hon. Temporary Deputy Speaker. I also want to add my voice to what my colleagues said in congratulating Hon. Cecilia Ngetich for bringing this Bill at the right time, considering the problems that particular profession has been having in this country.

What is very interesting is what we have been observing of late, that either councils which are in charge of law, or the ERB woke up one day and said it was not going to register people who had graduated from certain universities. What is very interesting is that these are public universities. What is worrying is the fact that, as a Government, we allow public universities to roll out courses and then innocent Kenyans who have gone for training and are qualified follow the regulations to the letter yet at the end of the day they are told that they are not qualified.

This is a very worrying trend considering that when you look at engineering students, they are “A” students. Most of them are “A” students. Very few of them are “B+” students. That tells you that all the children who have gone there had excellent marks. They are very good material but something has gone wrong along the way and made the ERB and the Council of Legal Education in this country to say that certain universities are not rolling out the kind of graduates that they require.

What am I saying? The issue is that the people who are charged with taking care of standards, and making sure that the right requirements and teaching methods are followed are either sleeping on their job or are not doing their work. So, poor Kenyans are suffering at the end of it.

I gave the example of the Kenya School of Law. The other day I was really shocked. Moi University has been rolling out law graduates for over 10 years. All over a sudden the Chief Executive Officer (CEO) of that place woke up one day and said--- Of course he used to be the secretary to the council; he said that graduates from Moi University are not well trained, and have been failing at the Kenya School of Law. Did he just discover that? Was it just a discovery? I believe that there is something that is very wrong; people have just decided to kill certain professions in this country, or there is something wrong with the training scheme; that means that the people who are in charge of quality control and standards are not doing their work.

We need a forensic audit as far as this is concerned. I understand the frustrations Kenyans are facing but in the process what is it we are doing to make sure we take care of the problem that is facing these young Kenyans? These are very bright Kenyans who have a very bright future. We cannot continue to punish our children; we cannot continue to punish Kenyans

because we think that, that is the way to go. We need to work on it and make sure that they are going to be given refresher courses so that they are not lost and confused after wasting all their years and money.

Hon. Temporary Deputy Speaker, I beg to support.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Regina Muia.

**Hon. (Ms.) Muia:** Thank you, Hon. Temporary Deputy Speaker. I rise to support this Bill. I am not going to repeat what most of my colleagues have said. We are not going to have a field for very selfish people who want to dominate this profession, and say that other people cannot be registered. I wish our colleague was here; I would tell him that those people, or groups, actually do not have the technology which is there now. Once they try to lock out our young people who are preparing to become engineers, they will be discouraged; once they are out there no one will consider that they are qualified. These are people who are qualified; most of the graduates taking engineering courses are pursuing other professional courses like marketing. I want to give an example of my constituency. When I request an engineer to come up with a bill of quantities (BQ) for a borehole, he is not the same person who is going to do that job. He will come up with a BQ and leave the work to other people to do. So, it is selfish for engineers to dominate the field and say that they are not able to work with other professionals. It is high time this House looked into this issue. We should support other bodies to come on board. We should not allow a group to dominate the field to the extent that they want nobody to do whatever they do.

We also have the body for registration of architects and quantity surveyors. They have formed a body bringing other professionals on board, so that they can work together. Any engineer without the current technology is not a serious engineer. If they are not going to recognise other fields and the need to work together, they will not learn. They should include those they have left out, because people learn through experience. Without any experience, those young people will be left out doing their own things. At the end of the day they may turn out to be the best, because some of them use other technologies. Things are changing. Our country has changed. For example, you cannot be a senior politician in one day. You start as a junior politician and continue growing up until you join Parliament. At the end of the day you are called a senior politician because you started somewhere and you have grown.

So, this group of 2,000 people, as other colleagues have said, has left out a very big group. Today you might think you are the best until a certain time when you sit down with other people and realise there are a few things you lack. Once you put your minds together, you come up with a professional body that Kenyans can trust.

I do not want to repeat what other colleagues have said. I support this Bill.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Abass Mohamed.

**Hon. Abass Mohamed:** Thank you, Hon. Temporary Deputy Speaker. I also join my colleagues in supporting the Bill. This country is now a middle-income country, and needs to grow. Without proper engineers, the country will not grow as we wish. For us to achieve Vision 2030, this country needs to at least have professional engineers. Unfortunately, most of the professional bodies have become closed bodies for a few Kenyans; most Kenyans cannot access them. We cannot have 40 million Kenyans depend on a few bodies. The Engineers Registration Board (ERB) recognises mostly engineers from the University of Nairobi (UON). Kenya has



grown and there are many universities. We cannot only rely on engineers from the UON. The Law Society of Kenya (LSK), the veterinary board, the ERB and the Kenya Medical Practitioners and Dentists Board (KMPDB) are closed. They seem to recognise only a few universities. This is biased. Our professionals must open up. We need to at least harmonise this Bill with the Act of 2011, so that we can have at least two regulatory bodies.

We have so many technicians, craftsmen and artisans who do very good jobs. Though Kenyan engineers are very professional, they are too expensive to be sustained by ordinary Kenyans. Very good work can be done by artisans and technicians. Engineering has become more or less like a white-collar job. Those constructing the Standard Gauge Railway (SGR) and the Lamu Port-South Sudan-Ethiopia Transport (LAPSSET) Project come from outside Kenya. Our craftsmen and technicians are able to do this job. Because they are not registered, they are not able to access decent jobs. Therefore, it is high time we established regulatory bodies for these technicians and technologists. We also need to open up our tertiary colleges, so that they can train technicians, craftsmen and artisans. Even if we call them spanner boys, these are the people who are supposed to deliver on the job.

Most of our tertiary colleges have been converted into universities. That is a wrong policy. Everybody cannot access a university because they cannot meet the cut-off points. We need to revive our tertiary colleges, so that we have more Kenyans trained in different fields. I want to thank the Government for creating (TVETs). This is the way to industrialisation.

With those few remarks, I beg to support the Bill. Thank you.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Jimmy Angwenyi.

**Hon. Angwenyi:** Thank you, Hon. Temporary Deputy Speaker, for giving me a chance to contribute to this important Bill.

First, I want to thank the Mover of this Bill. If we enact this Bill, this country will move to the First World. What Singapore did to move from the Third World to the First World was to first train technicians and engineering technologists, people who did not get a degree but a diploma or certificate in special areas. They embarked on industrialization, having technical people who would carry out industrialisation projects. The same thing has been repeated in Malaysia and China in the last 30 years. They have trained technicians, people who can do hand work in the industrialisation process. If we pass this law and make sure it is implemented, instead of our youth trying to go to university and get a piece of paper, they will go to these practical training institutions and get a certificate or a diploma, and will gain knowledge to move forward our economic development.

We have well-trained engineers, but they are white-collar professionals. They do not want to manually handle their work. They want to supervise work. The ones they are supervising are people who are not technically qualified. They are labourers who line up in major projects every morning to get casual work. If we had trained technicians being supervised by qualified engineers from universities, our work would be much better.

Currently we have buildings falling down nearly every day, especially in Nairobi. The construction of those buildings has been supervised by the engineers. We have stalled lifts here in Parliament, whose installation was supervised by engineers. One of them in County Hall failed to work within three weeks, yet its installation was supervised by white-collar engineers. If it was a technician who had done that installation, maybe it could not have failed to work.

Let this Parliament rise up if we want to commit ourselves to move this country from Third World to First World, and create opportunities for our youth who will have the technical knowhow to move us economically to the next world.

I beg to support. Thank you.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Mary Wamboi.

**Hon. (Ms.) Munene:** Thank you, Hon. Temporary Deputy Speaker, for giving me this opportunity to support this Bill. We know some engineers do not want other people to be recognised. We need to have more technical universities in this country, which can train people to get degrees. We should also regulate them, so that our young people who are now in universities learning about engineering can be accommodated; they will catch up with old engineers. We have so many young people who are doing engineering courses in our universities and technical institutions. We also have qualified technicians who are doing carpentry work.

The reason why we are saying this is because of technical institutions in Malaysia. I went to one of the technical universities in Malaysia and saw the way they are helping their young people. When they graduate, they go to a board and they are given certificates which show that they are qualified engineers. So when they leave the universities, they get jobs. As Hon. Gumbo has said, some engineers do not want to see young people come up. I do not know what they fear. This is because we pay a lot of money for our students to go to universities and be engineers and technicians, so that we can sustain ourselves in this country. When we want to build roads and big factories, we can use our people instead of getting people from outside. We are not saying that they are not good.

We also want our people to get money from our country. This is because foreigners come with their people and give our children small jobs. Chinese who are not engineers get more money than engineers in Kenya. This is because the engineer in Kenya is not registered as an engineer. I thank the Mover of this Bill. Our Government needs to upgrade more technical schools to universities, so that they can train our people on how to make cars.

We can see some people trying to make aircraft. If those people are trained and sponsored by the Government, we can actually make our own aircraft and vehicles. That is why I support this Bill. I know our people are going to be happy. Since we are the ones who make laws, it is better to regulate this sector, so that our people can be accommodated. I ask my colleagues to support this Bill. We also ask our engineers to help young people come up, so that they will be there in the future. If they are not going to be there, then we will not have enough engineers.

Thank you very much, Hon. Temporary Deputy Speaker.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. (Eng.) John Kiragu.

**Hon. J.K. Chege:** Thank you, Hon. Temporary Deputy Speaker. First, let me say that it is very hard to give my comments as an engineer. Very many of my friends have talked of engineers as people who are selfish. I am a registered engineer under the Engineers Registration Board and I had to go through a process. For you to be recognised as a professional engineer, you must not just have a degree certificate. It is a matter of demonstration of further training and experience. You have to prove to the Board that, in fact, you can conduct yourself as a professional.

Many people who have done engineering do not have to end up being engineers. They can be accountants or lawyers. We know some have joined these professions.

Hon. Temporary Deputy Speaker, I have spent a lot of time in my life training technicians, artisans and even specialised people; there is no engineer who can perform without the support of these people. We are missing the point, which is that there is the Engineers Board of Kenya (EBK) and this body regulates the conduct and professionalism of the engineers. We cannot have a board that is given a responsibility to take care of artisans. So, from that angle, I understand the frustration particularly of technicians and artisans, who feel like the Board does not represent them. This country has not been chaotic. This is one country that has demonstrated over the years that we appreciate people who are trained.

In this country, we have technicians and artisans, whom sometimes we refer to as Artisans Levels 1, 2 and 3, and who have licences to operate. I can say here without fear that you cannot operate even a crane, in this country, if you are not licensed to do so as a technician. You cannot work on a boiler in this country if you do not have the boiler licence to do the inspection.

In fact, there were certain omissions particularly in terms of the people who have graduated with a Bachelor of Technology degree; the engineers were not recognising that qualification. But this is something that can be discussed at the Board level, if only technologists are also represented on that Board. The problem here is that within the Board they have no say. We should look at the Board itself, and allow other people to sit on it and represent other interests. This can sort out this problem.

As we go forward, let us separate the issue of engineers from the issue of technicians, because training for the two is different and the requirements in the professions are different. This is a matter that we need to resolve as a people, but to have duplication in this country and to call upon people to be registered without specific qualifications is like calling for chaos.

The way forward for us is to look at the composition of the Board. We must look at the path of a Bachelor of Technology for a person who wants to be an engineer. It is a matter of saying how many years he should show practice and competence. It is possible also that you can be an ordinary diploma or a higher national diploma holder and end up being a registered engineer. I remember my employer once, the late Engineer Mimano, was not a university degree holder, but he ended up being the chairman of the EBK. It is an issue of showing what you have for you to be recognised as one. If we could sort out the issue of the EBK, we can solve this problem. I understand the frustration, but enacting another law will not be the solution for this country.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Joyce Akai.

**Hon. (Ms.) Emanikor:** Thank you, Hon. Temporary Deputy Speaker, for giving me this chance. First, I would like to congratulate Hon. Cecilia Ngetich for bringing this Bill. The issue here is inclusivity. As it is now in Kenya, it is only the engineers who are regulated, yet we have the technologists, technicians, operators and artisans. These are the people who have caused a lot of havoc to construction work in Kenya because of lack of regulations. If we bring on board others who are left out and they are regulated, we will solve the problem. The requirement is that any profession touching on human safety, health and public welfare has to be regulated.

Hon. Temporary Deputy Speaker, we live in an age of global competitiveness, professionalism and expertise. We have global conventions that govern the practices. With regard to this, we have the Washington Accord, the Sydney Accord of 2001 and the Dublin Accord that recognise the various qualifications in engineering. This has also to be taken into account. If passed, this law will regulate standards and practices. It will set the qualifications

required for registration. It will save us from quacks, who have dominated this industry. It will also transform this country and recognise new courses that blend engineering with new technologies such as information and communication technology (ICT), aeronautical engineering, aviation engineering, environmental engineering and irrigation engineering.

Hon. Temporary Deputy Speaker, I believe that this is the way to go. This Bill is very important for this country.

Thank you.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Kabando wa Kabando.

**Hon. Kabando wa Kabando:** Thank you very much, Hon. Temporary Deputy Speaker. First I would like to congratulate Madam Cecilia Ngetich for this initiative. She has been with us and invited us to her caucusing and networking with the academia and professionals in this sector. Therefore, bringing this Bill here was as a result of very comprehensive and detailed consultations, consensus building and putting the status of the sector into consideration.

It is clearly suited to Vision 2030, which we sometimes seem to bury because of the new constitutional dispensation, which has raised issues of development, including devolution as flagships across the board, besides the fact that we are still anchored on the flagship of Vision 2030. That plan clearly indicates the empowerment of this country through the training of young people, their empowerment, access to opportunities and enabling skills that are relevant to this nation. It needs no gainsaying that, indeed, technical skills are very key to putting our development agenda on the platform of where we want Kenya to go, that is the middle income economy with very qualitative living standards, where opportunities for income will be guaranteed. This is because we will have created the necessary infrastructure. If there is a gap that exists and it is acknowledged both by the Government and all stakeholders, including those who make critical assessment of our development needs, then it is the lack of technical knowhow and availability of technologists and technicians who are very key in putting up the infrastructural projects that we need in this country. The fact that we are still importing low cadre labour in the 21<sup>st</sup> Century, 50 years after Independence, is itself a challenge. In fact we pay them so expensively in order to retain them in this country, yet we are saturated with a sea of young people who are very restless as a consequence of lack of jobs and opportunities.

Therefore Hon. Temporary Deputy Speaker, licensing, registering, controlling, or having a framework that will enable these vulnerable individuals and those that have graduated to be checked and audited in a professional manner--- That they should be pooled in a way that is very institutional is an idea whose time is overdue.

Hon. Temporary Deputy Speaker, in conclusion, it is necessary to benchmark our own youth in a formula that will make them globally competitive. It is not just about the usage of their skills within the country, but also that labour should be exportable.

Hon. Temporary Deputy Speaker, you know very well I had an opportunity to work in the Ministry of Youth Affairs as an Assistant Minister for five years. We had a programme on youth exchange. Indeed, there are areas that we cannot supply adequately just as in the medical world. We have people in the medical profession who are very competitive elsewhere, because their ratification mechanisms are very solid. This is an area that will help create opportunities internally, domesticate our talents among young people and also export outside them to enable the country to widen the revenue stream from foreign exchange. Therefore, it is necessary for us, as a House, to endorse this Bill by Hon. Cecilia Ngetich because it is one way going forward.

As we do that, we should ask: Do we need to address the question of youth polytechnics and vocational training centres and technical institutes which are now almost decaying in the counties because they have not been focused properly? This move will lead us to a---

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor to Hon. Member for Kiharu.

**Hon. Kang'ata:** Thank you, Hon. Temporary Deputy Speaker. I rise to support this Bill. I am very happy with this proposal by Hon. Cecilia. Let me start by saying that initially, I was somehow 50-50, but after hearing arguments from those who are opposing and those who are supporting, I am now convinced why we should support this Bill.

The reason why, initially, I was somehow skeptical, was because I thought maybe this Bill is going to whittle down the engineering profession. I am a firm believer in the fidelity of key professions. In particular, professions like engineering and medicine are very important to this country. Leave alone law. Law, I believe, is just a course there. Serious courses like engineering should be supported.

I have now been convinced that, indeed, there are some courses which the Engineers Registration Board has refused to recognize. We do have, for instance, Bachelor of Science in technology. Such of graduates, in my own opinion, should find somewhere they can be fitted in this society. Therefore, this bill comes in to provide a situation where such graduates can fit into society.

Two, I am also aware of some courses which are taught in several universities. an example is civil engineering in universities like Jomo Kenyatta university of science and technology and Masinde Muliro university of science and technology. The ERB has refused to register graduates in technology. I know that we have litigation with regard to these matters. Those people have gone through rigorous courses. If the ERB is not going to give them a good home, i do not see any reason why this bill should not be used to address that lacuna. They can as well become technicians. You never know, such people can excel as technicians, eke out a living and provide good service to this country.

I have also remembered out of these discussions that every constituency now is coming up with a technical college. I want to laud His Excellency Uhuru Kenyatta and his deputy for the brilliant idea of ensuring that every constituency has a technical training institute. My question is: Where shall those graduates go if at all we do not have such kind of an enabling law that is going to create a profession for those technicians?

The idea of having technicians is based on the realization that, indeed, people who interact with *wananchi* on a day to day basis are usually technologists. it is not the engineer. rarely will you ever find an engineer coming to your house to fix your door, do certain things or even build your house. Many of us here have houses. i am not aware of anybody who consulted an engineer when he was constructing his house.

Therefore, the reality on the ground is that the people who interact with *wananchi* on a day-to-day basis, the first port of call, happens to be people who are going to be regulated by this law.

The same happens in other areas such as the health sector. The people who interact with the *wananchi* a lot happen to be clinical officers and nurses. Therefore, if we were to have a situation where in the health sector we do not have a law that regulates nurses or clinical officers then we would not be appreciating the reality in Kenya.

The same also applies in the engineering sector. The people who interact with *wananchi* a lot are technologists. Therefore, we need to support their industry, regulate them and provide them with an enabling environment under which they can practise their trade. The only area I would ask my dear sister to check is the issue of who is an engineering technologist. The present Bill does not sufficiently establish qualification criteria. My sister has told me in private that she intended that one to be provided for by regulations. However, that is very dangerous. You may have a situation where you open up a Pandora's box. You may even have a situation where you are in conflict with the Engineering Act. For avoidance of doubt, and conjecture, let us clearly define who is going to be covered by this law and which diploma, degree and course will be applicable.

Therefore, I support the Bill.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): I now give the Floor back to the Mover of the Bill to respond. Hon. Cecilia Ngetich.

**Hon. (Ms.) Ngetich:** Thank you very much for this opportunity once again. Before I reply, I want to give three minutes to Hon. Chanzu.

**Hon. Chanzu:** Thank you, Hon. Temporary Deputy Speaker and Cecilia for giving me the chance to state a few issues.

There are quite a number of issues under this Bill. I am sorry I could not be in earlier because I had a serious case in hospital. There is somebody who is very sick.

I listened to some of the contributions and I think they are quite valid. The most important thing is for us to address this issue with a lot of soberness, because our economy is expanding. In the year 2003, we were dealing with a budget of Kshs283 billion in the economy of Kenya. Today, we are dealing with a budget of about Kshs2.1 trillion or Kshs2.3 trillion. This means that within those few years the economy has grown seven times. The interesting thing is that the economy is growing at such a rate, but when you look at our rural areas, you do not see that growth. With the new Constitution we also have to think.

I am one of the professionals who are affected by some of the changes taking place. When we came from university, it was very difficult for us to register with the Board of Architects and Quantity Surveyors. It was extremely difficult. It was something that was carried over from the colonial mentality, where those who were running the profession at that time found it so lucrative that they did not want to allow Africans to get in. As Kenyans, we should not behave the same way. We need to eventually open up.

With regard to the ERB, one of the reasons why this is coming about is that they have insulated themselves too much. If they had been proactive enough to come up with this kind of suggestion, we would not be having a problem. We have very many students who are coming from polytechnics. Even now, the youth polytechnics that we are putting up in the constituencies, although they are under county governments, are our institutions. We are going to have so many people joining the polytechnics because with the 8-4-4 system of education, everything changed. Students get to Form Four and those who go to university are very few compared to the population that is left behind because of the 8-4-4 system of education. These are the ones who go to these colleges and can benefit from this Bill.

Ms. Cecilia, later on we will need to consult again, so that we eventually have an umbrella body which can take care of all these worries about professionals that I heard Eng Gumbo trying to raise. We cannot insulate ourselves now.

I support the Bill.

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): Hon. Cecilia.

**Hon. (Ms.) Ngetich:** Thank you very much, Hon. Temporary Deputy Speaker. It is my time now to reply.

In replying, I want to address a few issues that were raised particularly by those who were opposing the Bill. Before then, I want to take the opportunity to sincerely thank the Members. I was making a record and a majority of Members, who were about 27, supported and only three opposed the Bill. So I want take this opportunity to sincerely thank the Members for taking their time to study the Bill.

Initially, I was worried that it being a very technical Bill and knowing that many people may not be in the line of sciences--- I thought I would not find a lot of support. Thank you very much.

Those who have opposed have their right to opinion. But I want to say that they proposed amendments to the Engineers Act. As earlier said here, the Engineers Act, before it was amended in 2011, had a clause that accommodated some group of technicians, but they removed it completely. I am now wondering why the change of heart to incorporate technologists and the technicians into the Act.

It is also good to note that since Independence, The Engineers Board of Kenya, have only managed to register 1,868, to be very specific out of more than 26,000 graduates who have graduated from the various universities. This is something in the public domain. Initially we used to have University of Nairobi as the only university offering the course, but with the establishment of another 22 public universities, most of which are now offering engineering courses, there is a population of about 3,000 engineering graduates graduating yearly.

I tried to do some calculation. A registration of 1,868, gives an average of about 30 registered per year. If they were to embark on registering their own engineers, who are about 26,000, it will take another 866 years to register them at that rate.

Thirdly, I would not think that we need to go that route. Even the hon. Members who had a different opinion, rightly put it that engineers are very different from engineering technologists. It is like doctors blocking the nurses from being registered. It is as clear as that. They have said it clearly that courses done by the engineering technologists and engineers are very different. One then wonders why try to stop another profession from being regulated, yet you have recognised the fact that they are very different. We have had a very good example here of Hon. Kigo who is in the accounting profession. Initially, the intention was to have one profession for holders of the Kenya Accounting Technician Certificate (KATC) and other level of accountants, but now we also have the Certified Public Accountants. The KATC people have been completely swallowed up. They have no say. When it comes to voting, they cannot get positions even to represent their profession. I, therefore, caution that this is not the way to go.

Indeed, this Government is currently constructing a technical institute in every constituency. What has been budgeted for is Kshs50 million per institute. I am wondering where these students will go thereafter.

We have the Vision 2030, which talks of making Kenya a middle income country with better life, through industrialization. The only way to achieve industrialization is to have room for such students registered in order for them to be legally recognized, and be able to participate rightly in their areas of training.

I want to end by saying that indeed this is the right time to pass this Bill, so that students who have rightly pursued various courses – which we are going to mention – can be registered.

We have 10 technical universities in Kenya, including the Technical University of Kenya and Technical University of Mombasa, among others. Students who qualify for Bachelor of Technology degree, among others, should be registered by the Engineers Registration Board. Those who do not qualify should not be registered.

As we move forward, I appreciate that there are areas of this Bill which will require amending. This will be done during the Committee Stage. I will propose some amendments.

With those remarks, I beg to reply.

### ADJOURNMENT

**The Temporary Deputy Speaker** (Hon. (Ms.) Shebesh): Hon. Members, we will not put the Question at this time.

The time being 1.00 pm, the House stands adjourned until this afternoon, at 2.30 pm.

The House rose at 1.00 p.m.