

DÁIL ÉIREANN

AN COMHCHOISTE UM CHUMARSÁID, GNÍOMHÚ AR SON NA HAERÁIDE AGUS COMHSHAOL

JOINT COMMITTEE ON COMMUNICATIONS, CLIMATE ACTION AND ENVI- RONMENT

Dé Céadaoin, 26 Meitheamh 2019

Wednesday, 26 June 2019

The Joint Committee met at 5 p.m.

Comhaltaí a bhí i láthair / Members present:

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| Timmy Dooley, | Terry Leyden, |
| Jonathan O'Brien,* | Tim Lombard. |
| Eamon Ryan. | |

* In éagmais / In the absence of Deputy Brian Stanley.

Teachta / Deputy Hildegard Naughton sa Chathaoir / in the Chair.

The joint committee met in private session until 5.20 p.m.

National Broadband Plan: Discussion (Resumed)

Chairman: I want to read a correction to the record. The University of Limerick, UL, academics who appeared before the committee on Wednesday, 19 June, have requested the following correction to the record of yesterday's proceedings, which I will read into the public record. At yesterday's with committee meeting with Eir, it was stated that the UL academics who attended the previous meeting may have said that the standard of Eir's fibre cable was not of the same standard as the fibre that would be overlaid by the preferred bidder in the 300,000 premises exclusion zone. The UL academics did not state that Eir's fibre was inferior to National Broadband Ireland, NBI's, fibre at any stage.

We will proceed with today's meeting on the national broadband plan and I welcome Mr. Denis O'Leary, head of strategy and innovation, and Mr. Michael Mahon, former national broadband plan, NBP, project manager, from the ESB to discuss the national broadband plan.

Before we begin I wish to draw attention to the fact that by virtue of section 17(2)(I) of the Defamation Act 2009, witnesses are protected by absolute privilege in respect of their evidence to this committee. However, if they are directed by the Chairman to cease giving evidence in relation to a particular matter and they continue to so do, they are entitled thereafter only to a qualified privilege in respect of their evidence. They are directed that only evidence connected with the subject matter of these proceedings is to be given and they are asked to respect the parliamentary practice to the effect that, where possible, they should not criticise nor make charges against any person, persons or entity by name or in such a way as to make him, her or it identifiable. I also wish to advise that any submissions or opening statements that they make to the committee may be published on the committee website after this meeting.

Members are reminded of the long-standing parliamentary practice members to the effect that they should not comment on, criticise or make charges against a person outside the Houses, or an official either by name or in such a way as to make him or her identifiable. I remind members and witnesses to turn off their mobile phones or switch them to flight mode.

I invite Mr. O'Leary to make his opening statement.

Mr. Denis O'Leary: I thank the Chairman.

As well as a two-page statement, we circulated a short presentation on ESB's involvement in the national broadband plan, ESB's involvement in the telecoms industry in Ireland generally, the establishment of SIRO, our delivery vehicle, an introduction to the broadband plan and the timelines that were key to that, the commercial challenges and the key decisions that led to our withdrawal from this process over two years ago, and some summary conclusions.

We first got involved in the telecoms business back in 2003, when we ran fibre on the overhead transmission network with a northern ring which covered north of Leinster with a T up into County Donegal. There was a southern ring which covered most of south Leinster and much of south Munster. That was a backhaul network, which basically means it was similar to a motorway network, and all the major retail companies Eir, Enet, Virgin and BT were customers of that network since 2003.

A diagram in the submission shows the lower voltage system - the 40,000 or 38,000 volt system. We have approximately 700 stations all over the country. One can take it that any town in Ireland with a population greater than 3,000 to 4,000 people has one of those stations. Another diagram represents the medium voltage system - the 10,000 to 20,000 volt system, which ultimately brings electricity to every home in the country. We have approximately 90,000 km of that network.

We had this idea that as well as being the provider of the backhaul network utilising the electricity network on a larger scale gave us greater commercial opportunities in the telecoms business. We looked at it in a lot more detail in 2014 because the European Union had produced the digital agenda for Europe. It was the first time that the whole issue of the replacement of the historical copper networks had been addressed in terms of a new type of high-speed broadband network and what would be required in the more modern economies to deliver both the uptake and the download speeds that both residential customers as well as commercial and industrial customers would work with into the future. Ireland at that time was lagging behind the European average in terms of the take-up rates, the availability and the speeds available to customers in Ireland at that time. We decided there was an opportunity there but we had to make a decision as a company as to what level we would get involved in this business. On the one hand, we could simply lease out the electricity network to a telecoms operator while on the other we could do end to end and do the infrastructure, the wholesale, and the retail.

We discounted both of those extremes and landed in a position that we would become an infrastructure company through a joint venture with another telecoms company. The reason was we did not have real experience in the mass telecoms market, nor did we know enough about telecoms pricing or about the telecoms industry, as such. At that point, we went into a very extensive procurement process that lasted more than 12 months. At the end of it, Vodafone was the preferred candidate and it joined up with ESB to form this new company called SIRO. The structure of SIRO is that there is a joint venture agreement between the two main shareholders, ESB and Vodafone. SIRO has a separate agreement with ESB Networks called the network access agreement which contain the terms and conditions by which SIRO must abide in order to access the electricity network to string the fibre on the network.

That company was set up in 2016 and is functioning at fairly optimum speed since mid-2016 or the start of 2017. Since then it has passed nearly 250,000 homes with broadband network, or 242,000 homes to be exact. We have connected more than 42,000 customers. The target for this phase of the business plan for SIRO, being funded by both shareholders, is to pass 450,000 homes. This represents an investment of not far off €500 million in the telecoms infrastructure business in Ireland. We were the first retailer to offer a 500 Mbps and a gigabit service to the residential sector. We considered the company to be best in class in service delivery and there are nearly 14 retailers operating on the SIRO networks at this time. It has been a tremendous success.

The phase one concentrated on the 50 towns outside the main cities, particularly outside Dublin. Once that is completed, the shareholders will discuss the options for a phase two. To date, the business has been very successful and has met the key metrics set in terms of a formal business plan.

There was then talk of a national broadband plan. I have provided a diagram of Ireland and members can see the comparators. What is in blue in the diagram is what is not in the intervention area. The areas and premises in the intervention area are coloured light brown and orange. Those 757,000 homes are in the two coloured areas. The different colours represent the fact

that initially there were to be two lots. If we compare SIRO's challenge with the challenge of developing and rolling out a national broadband plan, SIRO's plan was to cover 450,000 homes, while the national broadband plan, NBP, was to cover 757,000 homes. SIRO intended to roll out about 1,300 km of fibre, while the NBP plan, based on our technical design, would have required nearly 77,000 km of fibre. That is an extraordinary structural, engineering and project management challenge. The amount underground was minuscule in the NBP. The reason for the State putting a national broadband plan in place was that it would not be commercial for any of the key operators to go into these rural locations and roll out fibre in the hope the customer take-up and revenue from it would generate an adequate return from the investment over 20 or 25 years. Some stimulus was needed. To do it in the way we were going to do the technical design would have involved very close to 600 mini-exchanges throughout the country. They would have been based in our 38Kv sub-stations and medium voltage sub-stations. That was the level of network design required to ensure the required broadband speeds set down by the Department in the tender documents could be met for every single household on the island. That would have required an extensive amount of fibre in the intervention area.

SIRO was formed in 2014. From mid-2014 to 2015 there was a lot of discussion with the Department on the strategy and mapping for the NBP. Much of it was about technical issues, the number of houses and the accuracy of the mapping in the intervention area. In mid-2015 there was a draft strategy and in December 2015 the Department published the revised strategy and the updated map and commenced the procurement process. At the time most of the emphasis was on the technical and mapping side and not much on the commercial contract. In quarters 1 and 2 of 2016 we prepared a detailed pre-qualification submission to show that we had the financial support of our parents and the ability to build, operate and manage large-scale networks.

In June 2016 the Department pre-qualified the bidders and progressed to the formal procurement process. That was the first time we got sight of the commercial contract and its conditions. In December 2016 the Department advised bidders that there could be 300,000 premises removed from the contract owing to a commitment by Eir that it would do these premises on a commercial basis and that there would be no need for any subvention or State funding for them. That had an impact on the business case on which we had been working from a technical point of view and from the point of view of the potential revenues that could have been generated from the original subvention area to what would be a revised subvention area, minus the 300,000 homes. Nevertheless, we asked for additional time from the Department to redo the technical design because we had to go back and start from scratch. I can explain later the impact of the 300,000 figure on the business case. As we progressed, following the withdrawal of the 300,000 premises and with certain challenges in the construct of the commercial contract associated with the NBP, we met the Department on several occasions. In September 2017, following more urgent meetings, we asked it specifically to consider certain requests that would have made the possibility of presenting a commercial business case less challenging than it was. While it did move on some issues and tried to help us on others, at the end it was not enough. Following two years of fairly intensive involvement by a not insignificant number of staff and outside help in the ESB, a decision was taken by both shareholders in SIRO that it would not fit with what they had hoped for and in September 2017 we advised the Department that we were formally withdrawing from the process.

The commercial challenges associated with a significant infrastructural job such as a national broadband plan can be broken down into four parts. Above the line are the costs, the cost to build the network. It is very extensive. I was reminded at the start by one of the guys working

on the project that the length of fibre required to serve all homes in rural Ireland, 80,000 km, is roughly twice around the world, but it is a one-off cost that has to be managed. The second part is the day to day cost of managing that level of telecommunications equipment, managing the maintenance of the equipment, all fault repairs, the information technology, IT, systems and the billing systems. To match it, there is the amount of revenue from each customer and, most critically, the number of customers who will connect to the system. There was a point when the number of customers was in the region of 800,000 when we would have been quite positive about the business, but when the 300,000 premises were removed, it had a very serious impact on the potential and projected revenues over the ten, 20 or 30 years of the project. That is what made it really challenging.

The key issues that forced SIRO and its shareholders to withdraw from the NBP process approximately two years ago were the removal of the 300,000 premises, the risk apportionment within the structure of the contract, the financial viability of the contract simply owing to the risk apportionment within it, issues with the use of alternate networks, an issue we can discuss, and the rebalancing risk. When we entered the project in 2015, we entered with high expectations and in very good faith. We put together a really good team of people to get into a level of detail on the project by which many at senior level in the ESB and Vodafone were astounded. Mr. Mahon and his team did that work. The reduction of the intervention area by 300,000 premises had a material impact on the project. Throughout 2017 we were really challenged as a business to make a business plan that would meet the financial criteria set by both shareholders. In quarter 3, following significant engagement with the Department, we were left with no choice but to withdraw from the NBP. The ESB has since moved on. It has been two years since anybody in the ESB or Vodafone has worked on the national broadband plan. It is amazing what happens within two years. In the ESB our focus is on delivery of our Brighter Future strategy in working with and supporting the Government in the implementation of its recently announced climate action plan.

Chairman: I thank Mr. O’Leary. At our meeting yesterday with Eir it stated it could design, build, operate and upgrade the poles and ducts and pay value added tax, VAT, for €1 billion to roll out the NBP. That is in contrast with its final draft bid of €2.75 billion, which did not include VAT. Is that credible? Is coming in under €1 billion something that the ESB could do?

Mr. Denis O’Leary: As already stated, it is two years since we exited the process. I know from media reports and so on that the process has changed somewhat in the interim in the context of the subsidy, the size of the intervention area and some of the commercial issues that were in the contract. What we worked on two years ago is different to what I understand is there now.

I am loath to comment on the bids of the two companies because I do not know what is there as regards project delivery. There seems to be some confusion as to whether we are talking about the total project or the main fibre running along the side of the road or the fibre running along the side of the road plus electronics and all the equipment needed to run the fibre. Are we talking about all the maintenance costs or the drop cost to all these customers? I do not know what is included in the €1 billion in terms of the figures quoted yesterday.

The Chairman asked whether the ESB or SIRO could deliver the project with a subsidy of €1 billion. Based on the work that we had done by 2017, the answer is that the ESB would not have been able to deliver the project for a €1 billion subsidy.

Chairman: There has been considerable public commentary going back some months, with which, I am sure, Mr. O’Leary is familiar, to the effect that ESB poles could be used to roll this

out. Will Mr. O’Leary outline how he would replace fibre and what challenges, if any, in placing fibre along electricity wires and its impact? There is a popular narrative that the ESB could roll this out.

Mr. Denis O’Leary: The ESB has a nationwide infrastructure. We have a connection and probably a piece of equipment in most fields throughout the country. Eir has a similar national infrastructure except that it is predominantly along the roadside. Fibre can be run on the ESB electricity infrastructure. Before we signed the joint venture with SIRO and allowed it to roll out fibre on the ESB infrastructure, we carried out intensive testing on the fibre network at our main test centre in Portlaoise. We also built test facilities in different parts of the country and tested the network under the most extreme conditions in the context of storm loading, wind loading and ice loading. We then developed a set of criteria and standards that would have to apply and would be applied by the local ESB networks management team to any company that wanted to run fibre on the ESB infrastructure, namely, SIRO. We are confident about the ability of the electricity infrastructure to hold the fibre network if the standards are applied without any risk to the key purpose of the electricity infrastructure, which is the delivery of a reliable supply of electricity to all customers. The latter is the one thing we would not want to undermine in any way. We have done that work and are confident about it. It is not easy running fibre on the electricity network because there is energy on the infrastructure. In the vast majority of cases, the network must be disconnected and earthed before any work can be allowed in order to string the fibre. It can be done and it is possible to do it if due regard is had to the electricity infrastructure.

Chairman: Is it correct that if repair work were being done on the broadband fibre, there might have to be an electricity outage?

Mr. Denis O’Leary: Not necessarily but it might have to happen. Our experience in SIRO, where we have rolled out an extensive amount of fibre, is that the fault level on the network is tiny. It is really robust infrastructure.

Chairman: I am also chairperson of the Joint Committee on Climate Action. Mr. O’Leary referred to the ESB’s focus on rolling out charging points. What kind of capital investment plans are in place for this. We have set a target of 70% in respect of renewable electricity generation by the year 2030. How would the ESB’s capital plan have worked had it also been rolling out a national broadband plan?

Mr. Denis O’Leary: That is a very interesting question. If one looks at the challenges faced by the ESB up to 2030, it is not only than the 70% target for renewable generation but also that we may have to connect over 500,000 new homes in the same period. In the context of the climate action fund the Government launched last week, reference has been made to retrofitting up to 400,000 homes in the same period and providing the charging infrastructure for 300,000 electric vehicles. Members will be aware from media reports of the challenges we face in terms of supplying energy to the data centres that are trying to locate operations in Ireland. Given the very strong inflow of foreign direct investment, we notice the degree of the electricity service, both in its speed and quantity, increases as we go along. These are just the issues in terms of delivering our key strategy, A Brighter Future, and supporting the Government. In addition, the ESB is getting ready to submit its PR5 - price review - submission to the regulator, which is the key networks work programme until 2025. In terms of our work programme, we have a full book and we are at our limits in terms of funding. Were we to undertake the national broadband plan, there would have to be a discussion on what plans, or what elements thereof, would have to be deferred. It would be really difficult to deliver everything that is on our books and also the

national broadband plan. The funding issue would also have to be dealt with.

It is two years since the ESB withdrew from the process. We have not done any work on it in over two years and things have moved on, so we consider that to be a hypothetical situation.

Chairman: I thank Mr. O'Leary and call Deputy Dooley.

Deputy Timmy Dooley: I thank Mr. O'Leary for a very thorough, comprehensive presentation. His reputation is such that I would not expect anything less from him.

The ESB delivers electricity to every home in the country under a mandate from the State and is subject to oversight by the regulator. If the State was minded to mandate the ESB to deliver broadband to the 542,000 premises in question notwithstanding the issues involved, is it correct that it, as a semi-State company, would have to do so?

Mr. Denis O'Leary: This would have to be done under a state aid subvention. As I told the Chairman, we have withdrawn from this process in the past two years and have worked on all the other key programmes I mentioned. Any potential broadband plan has passed us by. Without being an expert, my understanding of state aid is that it would be a challenge in getting to that position. If we were mandated to do that as a company, then we would have to seriously consider it then.

Deputy Timmy Dooley: Mr. O'Leary discussed the issues to and fro with the Department on the NBP process. He is well aware of what Eir has stated about it being cumbersome, complex and difficult. Let us go back two years to when Mr. O'Leary was in the thick of it. If he was asked, in a relatively simplistic way, to say how he would deliver high-speed broadband - commensurate with what he was doing in the SIRO areas - to the 540,000 homes, would he have done it in the same way as that proposed in the context of the NBP process? Yesterday, Eir told us that it has connected 300,000 homes to high-speed broadband in what it refers to as the 300k intervention area. It said that using the same model, criteria and standards it could connect 542,000 homes for €1 billion or less. It said that the difference between the €1 billion and €3 billion bid is to do with the complexity that was introduced, the inability to use existing infrastructure and the necessity to establish an entirely new wholesale operation and provide a different service-level agreement to customers.

To the uninitiated on this side of the room, myself included, it seems that the process undertaken by the Department was overly complex and aimed at creating a level playing pitch for everybody to compete on, rather than getting best value for money. The purpose was to create a level playing pitch so that anyone could come in, whether or not they had infrastructure. I am interested in how that relates not to Eir but to ESB.

Mr. Denis O'Leary: I will take the question on the project itself. In my opening remarks I tried to give some impression of the complexity of the project. Having been involved in the roll-out of infrastructure with ESB for many years, I know that it is an enormous project to roll out 80,000 km of high-speed broadband in the most remote locations in the country, where road access, the terrain and connectivity are poor. It is really difficult. For a project such as that, it cannot be decided to do all of west Cork and then all of north Kerry. Work would have to start in all 26 counties at the one time so that the whole lot could be brought together. That adds to the complexity. It is only once the process begins that it becomes clear how detailed the contracts and documentation have to be because there are so many issues to be covered.

It is true that we have had disputes and disagreements with the Department. On the one

hand, as the bidder, we wanted to have it our way; and on the other hand, in deciding the contract, the Department approached it from the point of view of ensuring that the maximum risk lay with the bidder, the minimum risk lay with the State and the State was covered in all eventualities. In doing that, the Department crossed all the t's and dotted all the i's, and it is our position that it crossed too many t's and dotted too many i's; that was our concern. However, we never disagreed with why the Department took that approach.

Deputy Timmy Dooley: Mr. O'Leary talked about minimum risk to the Department and the State and maximum risk to the bidder. I do not necessarily want a comment on Granahan McCourt, but if it was known how much was available from the State - be it €2.7 billion, €2.8 billion or €2.9 billion - and that ESB as a parent company would have to commit only €170 million of real capital and around €40 million of venture capital, would that have been a proposition worth pursuing?

Mr. Denis O'Leary: That is difficult to answer given the time that has passed. It is a different proposition now than when we left. I have no insight or detail on what the NBP quote was except what I have read in the paper, and I am not sure how accurate that is. In the same way that I am slow to comment on any statement made by Eir yesterday, I am also slow to comment on the bid from the preferred bidder.

Deputy Timmy Dooley: I do not want to push Mr. O'Leary but I need a sense of the quantum of money involved if we leave Eir and Granahan McCourt completely out of it. Is it fair to assume that when ESB withdrew, it did not feel that that level of subvention was available?

Mr. Denis O'Leary: That is a fair comment, but I will make one other comment on the subsidy. There is often an overemphasis on the subsidy in a gap-funded model, as this project was.

Deputy Timmy Dooley: Yes.

Mr. Denis O'Leary: The theory is that bidders submit the costs of delivering the project and infrastructure, and the subsidy plugs the gap between that and what would make a regulated return. It was not intended that an extremely high subsidy would make extremely high returns, because there was a clawback mechanism in the contract from the State. Unfortunately, if far inferior returns were made, there was no mechanism in the contract to support the bidders. All the risk lay with the bidder. That is one issue I want to raise on the discussions that have taken place regarding the subsidy.

Deputy Timmy Dooley: Recognising that the ESB is populated with highly qualified engineers, it is pretty adept at assessing risk, and the same could be said of Eir and its technical people. It is clear that this is an enormous project with an enormous level and multiplicity of risk. Based on its considerable experience of stringing cable and rolling out fibre and high-voltage lines, ESB recognised that at an early stage and decided that the risk was too great, given the return on investment versus the investment made. We have to draw our own inferences from the fact that a company such as ESB, with a fine track record, did not believe it was doable for the money available and that the achievable return was questionable.

This leads to a point that I have had real concerns about for a long time. How did a private investment firm from Boston, with a list of subcontractors and without the level of expertise in the marketplace, experience or understanding of the continued complexity of this process, go as far as it did? I do not expect ESB to discuss that; it is merely a comment.

The removal of 300,000 homes was termed by others as cherry-picking by Eir. It was en-

titled to do that and the State had no choice but to remove those homes from the intervention area because, once the offer was made to roll it out commercially, under state aid rules the State could not be seen to subvent that. It was a game changer for ESB, but the Department had no issue with it.

Having rolled out fibre into that area, can we assume that it is now easier for Eir to rock up and offer to do it for €1 billion, given that a good chunk of the groundwork is done? It could be said that that is Eir's good luck, but the truth is that this is a significant advantage for Eir and would help explain how its costs are less than those of anyone else in that position.

Mr. Denis O'Leary: Yes, it would. I will deal with the removal of the 300,000 homes. I do not know whether Deputies have it, but at the end of the presentation there was a slide-----

Deputy Jonathan O'Brien: It was about Mitchelstown.

Deputy Timmy Dooley: It takes a Corkman to provide clarity.

Mr. Denis O'Leary: What has happened in Mitchelstown has happened in every other town in the country. The red lines represent the main roads out of Mitchelstown and in the middle is Mitchelstown itself. All the houses in the middle already have high-speed broadband through fibre to the cabinet or fibre to the exchange, so they are not in the intervention area. While we had 775,000 homes, all the homes along the red lines were in the subvention area. For the 300,000 customers, Eir has removed from the intervention area all those on the red lines and will connect them on a commercial basis. Our equipment is in Mitchelstown. If we have to reach the homes in the intervention area, we must now go through all the red lines without fibre but we cannot pick up any customers because they are no longer in the intervention area. In effect, Eir has put a doughnut around each town, our equipment is in the middle of the doughnut, and all our customers are on the other side of the doughnut. We must go through the doughnut in every case to get to the intervention customers.

I want to be careful. I am not accusing Eir of anything. It made a commercial decision to take 300,000 customers out of the intervention area and indicated it would connect them on a commercial basis. From our understanding, that was perfectly correct and there was nothing anyone could do to prevent 300,000 people who had never had high-speed broadband from getting it. We had done 12 or 14 months of hard work on a good, technical design and case study but found we would have to start again. That was the impact of the 300,000 customers.

Deputy Timmy Dooley: Mr. O'Leary rightly identified that 300,000 customers will benefit and have broadband, and went on to state it will make the process a little more difficult for the ESB. It is a little bit like the television programme, "Dragons' Den", when the dragons say, "I'm out". The ESB is out. While I do not carry any flag for Eir, the truth is that its investment on a commercial basis will put it in a much stronger position to offer a better deal to the State, based on the level of subvention required to reach the 540,000 customers. It should have not been a surprise to any of us, although perhaps it was yesterday, that Eir was in a position to deliver against what the Government required for the citizens in question at a lower cost to the taxpayer.

Mr. Denis O'Leary: That is true and it is our understanding. One important aspect, however, is that following Eir's decision on the 300,000 customers, one of the issues we raised with the Department was that which the Deputy has just highlighted. We were at a serious disadvantage in having to get infrastructure through the doughnut before we could start picking

up the customers in the reduced intervention area. We had discussions with Eir, ComReg and the Department because we felt we should have access to Eir infrastructure in the doughnut at incremental costs in order that we would compete in the intervention area on the same footing. We had much difficulty with that issue in the summer of 2017 with Eir, ComReg and the Department, and it was not getting any closer to a resolution. It came at a time when the clock was running down, under pressure from the Department, and there remained many commercial issues. It was a reason we withdrew.

Deputy Eamon Ryan: I apologise that I must leave soon to raise a Topical Issue matter in the House. To tease out further what Mr. O’Leary stated, even after the 340,000 houses were removed from the intervention area, the ESB was still considering the possibility of connecting houses from the end point of those red areas, on the outskirts of Mitchelstown, where it would be just a regulator. If the ESB had provided the fibre on the same red routes through the doughnut, it would still be able to hook on at the end of point of that and continue the network from there. Mr. O’Leary indicated that the Department, or perhaps ComReg, was ultimately unable to agree on that. What were the Department’s concerns in that regard?

Mr. Denis O’Leary: It was not that the Department was unable to agree or had concerns. Rather, we never received an answer or resolution to the issue we had. Eir could have stated yesterday that the national broadband plan company has decided to run its own infrastructure through the area, presumably because it was unable to come to an agreement. We assessed whether it would have been cheaper. While we knew that the decision to remove 300,000 homes from the intervention area would have a significant impact on our business plan, we nonetheless kept working on it and assessed where we could reduce costs. We believed that one way we could do so was to minimise the capital spend to get from the equipment in the towns to as far as where the customers were in the reduced intervention area. That is one of the ways we examined the matter.

Mr. Mahon might confirm that to have been the case.

Mr. Michael Mahon: Yes.

Deputy Eamon Ryan: The national broadband plan has not yet concluded and is at a pre-tender process. From the committee’s hearings, it is clear the developer, Granahan McCourt, still has options for what it will use on the final few miles to a house. It has the option of using Eir poles but the Department and others have indicated that it would also be possible, in the final part of tendering process, to use the ESB poles to gain access to the houses in the intervention area. Has the ESB had any discussions with the Department or the developer about that possibility?

Mr. Denis O’Leary: My understanding is that there has been an initial request for discussion. There has been initial contact but it has not been in any great detail. It is public knowledge that extensive agreements have been signed by the preferred bidder and Eir for access to Eir infrastructure. The build model, therefore, is on Eir infrastructure. While hopping between Eir infrastructure and electricity infrastructure might sound simple, practical and fine, it is very complex and expensive. Eir infrastructure runs along the side of the road and does not have any high-voltage equipment or any dangerous electricity lines, whereas ESB equipment runs across fields, behind houses and is not always close to the telecommunications industry’s infrastructure. If the preferred bidder wants access to ESB infrastructure, it should get in contact with ESB Networks as soon as possible, identify the requirements and assess the best way to deal with them.

Deputy Eamon Ryan: In the Mitchelstown map, it seems that the remaining houses are on roads but, in fact, they are on the boreen network. They are very much one-off housing. If there is a ribbon development on a road, one can understand that Eir linking fibre along the telegraph poles to a series of houses on a road would be much more attractive than following a winding country road to a boreen. The ESB might have certain advantages in respect of the final mile to an isolated farm house.

Mr. Denis O'Leary: The Deputy stated we might have a slight advantage in respect of the final mile, but our problem is all the miles before the final mile. Reaching the final mile is the challenge.

Deputy Eamon Ryan: Setting up SIRO was a brave and correct investment by the ESB and Vodafone. Their analysis of the digital plans of Europe and the interconnection between digital and the electricity networks will only enhance matters. It seems to have been a brave and successful investment, given that SIRO has managed to pass 250,000 houses and has 40,000 customers. What will come next for SIRO?

Mr. Denis O'Leary: We are approximately halfway through phase 1 - the business plan - which will involve passing 450,000 homes and represents capital expenditure of almost €500 million. Between now and the end of phase 1, the shareholders will have to decide what the scope of phase 2 will encapsulate. There is significantly more enthusiasm in the Irish telecommunications industry for the roll-out of fibre than when we started SIRO. We might have had an idea of what phase 2 would be three years ago but we will now have to determine again what it will be. We expect board shareholders to be ambitious about what SIRO has the potential to become in the Irish telecommunications market.

Deputy Eamon Ryan: Representatives of the Department of Public Expenditure and Reform raised concerns here. They were similar to the concerns raised in the memorandum to the Government. A very unusual, separate memorandum was sent to Ministers. At the end, it effectively stated the process should be stopped and that the Government should start with a State entity - it was not specified which exactly - providing a revised roll-out. Eir stated yesterday one of the reasons it withdrew or encountered difficulty was that it would have had to set up a completely separate wholesale division, with all the various pricing arrangements and so on. If the Department of Public Expenditure and Reform had its way and there was a re-initiated process whereby the State was seeking to manage the initiative, similar to the way in which it proceeded with the MANs, would the system set up with SIRO, with its wholesale management, resources and the expertise built up, be able to respond to the Department if it came looking for the resources to be used in the way it outlined?

Mr. Denis O'Leary: I am not sure exactly what the actual question is. We stopped looking at this two years ago. So much has happened in two years. The technology has changed in two years. There have been considerable developments with 5G in that period. There are changes to the regulatory structure, the state aid structure and the structure of any contract. The question of the risk-reward parameters involving the Department and the bidders must also be borne in mind. Earlier we discussed ESB's existing workload. The priority in ESB at present is to deliver on its Brighter Future strategy and support the Government in the delivery of its climate action plan. We would have to do a lot of thinking before we could consider any of the matters raised.

Deputy Jonathan O'Brien: Despite the 300,000 being taken out and the doughnut effect, is it fair to say the ESB infrastructure could deliver to all the remaining homes?

Mr. Denis O’Leary: The existing ESB infrastructure outside the doughnut goes to all the homes. The infrastructure is in place.

Deputy Jonathan O’Brien: For the past two years, Mr. O’Leary’s organisation has not looked at this.

Mr. Denis O’Leary: No.

Deputy Jonathan O’Brien: For the organisation to examine it again, would the current process have to cease and would a new tendering process have to commence?

Mr. Denis O’Leary: We will not be looking at it any time soon and there is no need for us to do so. We broke our ties, as such, with the national broadband plan two years ago. It has not been mentioned in the ESB in the past two years, and I would say it has not been mentioned in Vodafone in the two years either. Both companies are busy delivering their own business plans. Anything related to a new process is hypothetical. So many things have changed in the two years since we left that it is difficult to answer any question.

Senator Tim Lombard: I thank Mr. O’Leary for his presentation, which has been informative. I was struck by the fact the fact that 76,000 km of fibre will be required. It is an amazing figure. If the ESB were to be involved and put that volume of cable in place, how much disruption would there be for its customers?

Mr. Denis O’Leary: It is a good question and it is something in respect of which we would have to sit down and plan carefully. Our intention is that no customer would suffer more than two day outages. We would approach it in many ways like electrification was approached in many rural locations. We would make it a kind of community event, indicating what was being done was for the community. I refer to the provision of an essential service a community does not have. We felt we would get the support of the local people but we would have to work very closely with them on issues such as that raised. We are used to dealing with people during outages, however, and we accommodate people who cannot deal with an outage. There could be a wedding, christening or Holy Communion. We try to accommodate such customers as much as we can. In general, we will try to do it as quickly as we can and minimise the outages for the customers.

Senator Tim Lombard: Regarding engagement with Eir and the doughnut issue discussed, how many engagements had ESB with Eir regarding the issue?

Mr. Denis O’Leary: I will pass this to Mr. Michael Mahon.

Senator Tim Lombard: Was plugging into the network discussed? If so, was there agreement? Was there a price? Was there any movement on the issue?

Mr. Michael Mahon: We did not engage with Eir until the figure of 300,000 was confirmed. The first thing we did was redesign entirely. As part of that, we considered the option of using the Eir infrastructure with the information we had, which was based on estimations from certain towns. It is not off the shelf. We had a number of interventions with Eir. SIRO had these over two or three months but the information was not forthcoming at that point. We also engaged with ComReg and the Department to push it along. We got to a point where we were not getting sufficient engagement to properly consider the matter in any revised proposal.

Senator Tim Lombard: The information was not received from Eir to put information

together to continue with the bid.

Mr. Michael Mahon: The team in Eir was trying to put together the information. Naturally, as the Senator will appreciate, there are Chinese walls between different parts of the organisation. Eir was trying to put together a team to respond to the requirements but we started the engagement a lot later than other parties may have because we were utilising the ESB infrastructure up to that point. In what we were looking for by comparison with what was being provided, there was probably a disconnect.

Senator Tim Lombard: Without that information, was it difficult to continue with the tender process?

Mr. Michael Mahon: With any consideration of using the Eir infrastructure, yes.

Senator Tim Lombard: Was there talk about pricing or any such issues?

Mr. Michael Mahon: As Eir is a regulated entity, there was some pricing discussed but it was not in sufficient detail for us to factor it into any proposal.

Senator Tim Lombard: Would Mr. Mahon have been confident that Eir would have agreed to the upgrade for the 25 years of the contract? Would he have been happy that this agreement would have been reached if his organisation were to plug in?

Mr. Michael Mahon: We engaged with Eir on a good faith basis in the expectation that it would be providing that service for the 25 years of the contract.

Senator Tim Lombard: Mr. O'Leary stated a team was put together in the ESB or SIRO to deal with the tender. How much did it cost to tender for the process? What was the layout regarding these issues?

Mr. Denis O'Leary: I believed I had covered most of the questions I believed I would be asked today. I do not have the answer to that question but I could come back to the Senator. We had a team of ten or 12 staff working full time for approximately 18 months.

Mr. Michael Mahon: That was just the ESB. There was a joint team involving ESB, SIRO and Vodafone. We had a team of more than 75 for most of 2016 and the period going into 2017. We had a cost sharing mechanism involving both parties. The costs are commercially sensitive. There was extensive work done from the beginning of 2015 through to mid-2017 on the process. We ended up mapping every house in the country.

Senator Tim Lombard: Regarding the strategy, ESB's challenges regarding energy and climate change were mentioned. Is the ESB happy not to be involved in the project, taking into consideration the challenges Mr. O'Leary mentioned, such as the number of homes to be brought on board, the 70% renewables target and everything else required under the new regulations coming down the line owing to climate change?

Mr. Denis O'Leary: I think we are. Due to the shareholders' interests in SIRO, we are not totally divorced from the telecommunications business in Ireland. SIRO continues to grow and to be more relevant to the people whom it is serving, especially now that we have launched a gigabit project, to which we can see the reaction of customers. We have a telecoms business that will grow and prosper. It is a comfort to be no longer involved in the national broadband plan. That is important to board shareholders. I cannot speak to Vodafone's work programme but I know from talking to the managers in Vodafone that it has an extremely challenging pro-

gramme in front of it, as do most telecoms operators. While the ESB has a challenging work programme, it is also an exciting time to be in the ESB. There is a significant focus on decarbonising the energy sector and on the electrification of transport and heat. We find ourselves at the centre of the key deliverables that have to be managed in the State over the next 20 to 30 years. It is essential for the Government and State to meet their decarbonisation targets. It is essential to the ESB to deliver its ambitious Brighter Future strategy. We have a full book. We are looking at the next decade to 20 years and at a challenging programme of work, not just for ESB Networks but also ESB generation and our consultancy and engineering wings. If the national broadband plan came in on top of that, it would probably not be possible to deliver everything and we would have to look at the priorities at that point. That we still have SIRO and are interested in growing it means that our involvement in the telecoms market continues.

Senator Tim Lombard: We heard yesterday that the process with the Department was onerous and complex. Was the ESB happy with its engagement with the Department and the governance?

Mr. Denis O’Leary: We had extensive engagement with the Department. At all times, I found the Department to be very good to deal with. It was open, co-operative and approached matters professionally. It provided all the information to the bidder but its interest was in protecting the State. One could say that it was the right approach. In the engagement we had with it, even up to the end, when we were looking for changes to the contract and it was unwilling to accommodate us, the relationship between SIRO, the ESB, Vodafone and the Department throughout the two year period was constructive and good.

Senator Terry Leyden: I welcome Mr. O’Leary, Mr. Michael Mahon and their colleagues. It has been a worthwhile exercise. They were initially reluctant to come in.

Mr. Denis O’Leary: The reluctance was because we had withdrawn from the process two years ago and had not put in a bid. As such, we were not really in the process.

Senator Terry Leyden: I still think this meeting with the ESB is useful. Members of the public are entitled to know exactly what was going on behind the scenes. There is a feeling that there was some sort of preference for the Granahan McCourt approach. It was so influential that it persuaded the Government to potentially award it a contract when it does not own any fibre or a single pole. That is extraordinary. We have a semi-State company with a proven track record which has accounts in every house in Ireland. It would be simple to extend the accounting system to fibre. It would be within ESB’s ability to do that. When I was in the Department of Industry and Commerce, I was in Kuala Lumpur with ESB International. The ESB went to Malaysia and the Middle East and secured fantastic contracts, employing over 750 people who were top technicians. I was very impressed by the ESB’s work there. It implemented an account system in Malaysia for its government, yet here, in the ESB’s own country, as a semi-State company, it could not come to some terms to ensure that it secured a contract as lucrative as the roll-out of broadband. In the end, if the ESB made money from it, the dividend would come back to the State. From my perspective, it was a win-win scenario. The current proposal, costing up to €3 billion, is a lose-lose scenario because Granahan McCourt will own all the infrastructure in 25 years and the State will not own anything. We do not know the cost per individual or the cost of the subsidy. I am lucky that I have privilege here, which is brilliant. I have far more faith in the ESB to do a job on behalf of the State than I would have in American venture capitalists coming in to do it. I do not know how Granahan McCourt will install the wires without working with the ESB or Eir. It has no physical structure. Why would the ESB walk away in September 2017, even when it is making substantial investments and making

money all over the world? That decision surprises me and I cannot understand it.

Mr. Denis O’Leary: I cannot comment on the bids of Granahan McCourt or Eir. The ESB found itself in a position, following Eir’s decision to commercially connect and run high-speed broadband to 300,000 homes, that the risk profile and structure of the contract had changed entirely. As I said earlier, I am not suggesting that there was anything wrong in what Eir did. It was perfectly entitled to do it but it had a dramatic impact on the potential revenues for the business. That, with some other issues in the contract, meant that the shareholders of the ESB and Vodafone were no longer willing to continue to fund the team that was putting together the bid. That is why a decision was taken to withdraw.

Senator Terry Leyden: From a historical point of view, when I was in the Department of Posts and Telegraphs a long time ago I tried to bring telephones into rural areas. At that time, Telecom Éireann was under the Department of Posts and Telegraphs. I tried to suggest that it use the ESB network to bring wires to rural areas. That was turned down due to being technically not possible. How did it become technically possible to put fibre-optic cables on to poles and bring them to rural areas when it was not possible to do so with telephone wires in 1982?

Mr. Michael Mahon: Telecommunications infrastructure in the past was all based on copper, which conducts electricity. There was a significant risk that it would interfere with the network and create potential risks, which could possibly go into somebody’s house. The two had to be separated. With the evolution of fibre technology and overhead fibre technology, which allows it to be strung between poles and is non-conductive-----

Senator Terry Leyden: It is non-conductive of electricity.

Mr. Michael Mahon: It is not. It becomes much safer. That is why the ESB, as with other companies, considered using fibre on its infrastructure. We have been doing that successfully for 20 years.

With regard to the Senator’s previous comment on the process, the Department went to great lengths, which I give it credit for, to ensure that there was a proper process from the start. This ensured that only competent bidders with the technical and commercial capability to deliver on the end project got through the pre-qualification process. Things might have changed for us but the Department followed that process from the start, in December 2015, until today.

Senator Terry Leyden: I thank Mr. Mahon for the clarification. I felt at the time that if the wires were adequately insulated, they would not conduct and would not have access to electricity. He makes a good point that fibre optics do not do that. I live in a rural area. We have quite a good service for our house provided by a company called Imagine. It is adequate for our current needs. I would prefer to have the ESB bring the fibre optic cable into my house directly rather than using radio signals. It is a tragedy that the Electricity Supply Board, our company, is not carrying out this work. I hope somebody in the Government will have the sense to quickly consider the matter again.

Deputy Sean Sherlock: I am the last person standing and many of my questions have been answered so I will not detain the witnesses or the Chairman. I thank the delegation as this has been a very clear-headed and lucid presentation that has gone a long way towards helping my understanding of the matter, and particularly the timelines. It was a very good idea to give us the timelines in respect of the company’s involvement with the national broadband plan. There is a very clear message from the witnesses that it was two years ago and they are talking about

the future. It is a very unambiguous message.

Having said that, I might detain the witnesses a while longer to help my understanding of the engagement with the Department up to the point in September 2017 when SIRO withdrew from the process. I am trying to imagine myself in the room where SIRO is engaging with the Department after the mapping exercise has been done and there is a revised intervention area. How did it come about that the company decided it was out and finished with the process? Is it because, as the witnesses stated earlier, the revenue reduction was such that it would just make it untenable? Was there any profit or return on investment where it could be said that even with the 542,000 premises in the amber area, the company could still persevere with the process? I may not be putting it across very clearly but what would it have taken for SIRO to have stayed in the game? That is the kernel of my question.

Mr. O'Leary has stated "it would also have led to a much bigger reduction in revenue and thus our overall potential target revenues were significantly reduced also". He also outlined the Mitchelstown example, which is fairly close to home for me, and the doughnut effect. At what point did the company say "that is it, we are gone". There was engagement and the witnesses have said it was a positive engagement with the Department. The company had just seen 300,000 connections being taken up by another entity so what would it have made this commercially viable for the company? I still cannot fully grapple that. Personally, I found it a pity that SIRO pulled out because of its international reputation, which was mentioned earlier, and the ability to get projects done in a very seamless and quick fashion. That is why there was a certain amount of disappointment.

Mr. Denis O'Leary: It probably was not just any one issue and the level of discussion and interaction we had with the Department was pretty intensive in summer 2017. I suppose we were looking for everything to change and there was a list of things we would have liked to have seen happening. The Department reminded us we were in the middle of a procurement process that was open and ongoing, although due to close. It was not really in a position to accommodate the list of requests that we had that we felt were reasonable.

Deputy Sean Sherlock: That is what I cannot understand.

Mr. Denis O'Leary: It was because the Department was in the middle of a process. There was not any one thing. There is no doubt the change in the intervention area from 850,000 to approximately 550,000 connections was very significant. As I said, that was a commercial decision, which is fine. With regard to the other changes, we were still trying to make a business case. Following much discussion and being advised by the Department that it could go a bit of the way but not the whole way, the shareholders made a decision. We had been at the process for two years and it was not looking like we would get to a position where a business case could be supported by both shareholders. The costs that were being incurred in staying with the process were not insignificant and they continued to grow. A company will bear those costs if it sees something positive on the horizon but when they are mounting up and things are getting more challenging, a decision will be taken. We decided not to go any further.

Mr. Michael Mahon: We spent two and half years on the process to that point. It was a large team spending much time and effort, including personal time and effort, committing to the project and trying to make it work. One gets to a point, as Mr. O'Leary notes, that it just does not stack up. The Mitchelstown case is a perfect example of the challenges. There is not just one example like Mitchelstown; there are 800 of them around Ireland. We engaged in the process and had great discussions with the Department but we were looking for one thing, and

regardless of whether other bidders were seeking it as well, the Department had to maintain a particular line. In fairness, it was very clear in that respect. There were other issues that were worked through with us that were probably of interest to all bidders. It was a very fair process.

Deputy Sean Sherlock: What I cannot reconcile is that there was a *de facto* change in the process. The tender process was designed to deliver X number but the numbers changed. They were reduced because of the actions of another entity. I would have thought there was a clear justification for all bidders to sit down at that juncture with the Department and say that the process had changed. The terms of the other parties may have been reasonable because of those material changes. I cannot reconcile the justification of the Department in saying that parties are in the middle of a tender process and there are restrictions in what can be said, etc.

I will refer to the current roll-out of services from SIRO. There were 242,000 homes passed and by virtue of this, there is potential for them to be enabled.

Mr. Denis O’Leary: It is what we mean when we refer to homes that are passed. These are homes that can be connected by a drop from a fibre optic cable running either underground outside the person’s home or overhead.

Deputy Sean Sherlock: The company has made 42,000 connections to customers.

Mr. Denis O’Leary: Yes.

Deputy Sean Sherlock: Is there a metric of cost per house?

Mr. Denis O’Leary: I do not have the figure for cost per home passed. I can get it for the Deputy. It may be commercially sensitive.

Deputy Sean Sherlock: That is fine. I can appreciate that it might be commercially sensitive. The company’s aim is 450,000 connections.

Mr. Denis O’Leary: That is according to the business plan for phase one, which was supported by funding of €450 million by both shareholders. That is the level of commitment they are making to the business currently. There is approximately two years for that business plan left to run and when we reach the end of it, the shareholders will sit down to discuss SIRO’s future and how they can grow the business with additional customers. When we looked at this three years ago, we were looking at a totally different landscape from what we are looking at now. We have to do a bit of thinking about it. Both shareholders are very supportive of the SIRO model and business and they really want to see it grow.

Deputy Sean Sherlock: I have absolutely internalised that as Mr. O’Leary said it in earlier interventions. If my constituent is supposedly encapsulated within the 300,000 connections to be provided by Eir but is in the last house on the link and is waiting for months on end or put on the never-never, is there potential for him or her to be included in the 450,000 connections that SIRO envisages?

Mr. Denis O’Leary: It would depend on where that person was relative to the last person we had served in phase 1. If he or she is a next door neighbour of the last person we served in phase 1, it is highly probable that he or she is a SIRO customer. Unfortunately, if he or she is 3 km or 4 km away from the last customer we served in phase 1, he or she will not be the type of customer to whom SIRO will go. It will go to a customer who is more suitable to be included in one of the intervention areas under the national broadband plan. That was the purpose of the

plan.

Chairman: I have a final question about something which I do not believe has been covered. The ESB doing this has been mentioned a lot. These are all hypothetical questions, but, for the purposes of clarity, if we were to roll out a contract such as this again and it was to be given to the ESB - we know what the issues are with state aid rules - will Mr. O'Leary clarify that a new procurement process would have to be gone through? Does he have an idea of what the timeframe would be for the process? In general, how long would it take?

Mr. Denis O'Leary: It is really difficult to answer that question. It is more a question for the Department. Anything to do with state aid is managed 100% by it. The ESB would have no involvement in it whatsoever. It is about the State getting clearance to make an intervention for a particular reason. I am not an expert when it comes to state aid, but I know that it is a very time-consuming process. We would then have to get into a procurement process which would also add time, as would appointing contractors. Time would be added all the time before we would reach a period in which the infrastructure could be built. Without knowing the first timeline which would be the difficult one, it is very difficult to answer the question.

Chairman: We have a statement from KPMG that it would take five years if we were to end this process and start all over again. Mr. O'Leary is stating that, in general, it would take time and that it would not happen within a year or two, as others have said.

Mr. Denis O'Leary: Yes.

Chairman: On behalf of the committee, I thank Mr. O'Leary and Mr. Mahon for coming before us and being so open in their answering of questions. We appreciate the fact that they are now outside the process, but we really value their contributions which will help us in our analysis.

The joint committee adjourned at 6.45 p.m. until 5 p.m. on Tuesday, 2 July 2019.