### **Analysis**

Stephen Flynn Road Management Office

# Interim Guidelines on High Voltage Electric Cables in Public Roads









### **Analysis**

- Why?
- What?
- Who?
- When?
- Where?









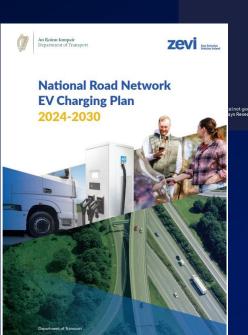


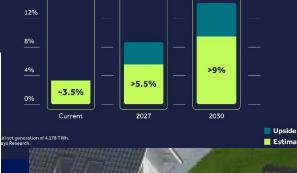
### Why?

- Energy demand is increasing
  - Data
  - AI
  - Electricity use is increasing as we decarbonise other energy use (Heating or Transport)















### Why?

- There is a need to decarbonise
  - 2023 was the warmest year on record globally
  - Rapid and significant reductions in GHG emissions are required - 51% 20 neutrality by no later than 2050

Ireland becomes second country to declare climate emergency

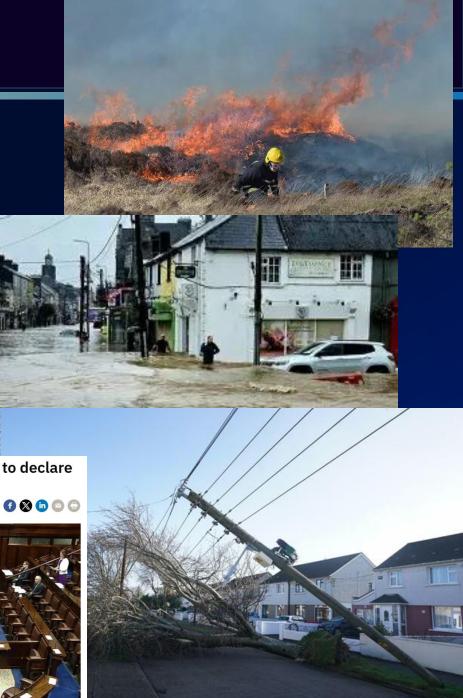












### Why?

 Transmission infrastructure plays a pivotal role as it facilitates the integration renewable energy sources into the grid

The Public Road offers

routing option that (generally) avoids landowners

- has less environmental impacts
- physical protection





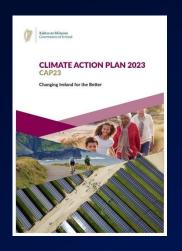


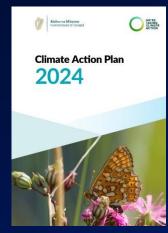


### **Analysis**

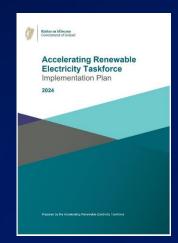
### Why?

"All relevant public bodies will carry out their functions in a manner which supports the achievement of the renewable electricity targets, including, but not limited to, the use of road and rail infrastructure to provide a route for grid infrastructure where this is the optimal solution."

















### **Analysis**

### Why?

High Court rules An Bord Pleanala must prioritise climate law in wind farm case likely to affect all public bodies













### **Analysis**

- Why?
- What?
- Who?
- When?
- Where?
- How?









### **Analysis**

### What?

### The interim guidelines are

- Issued under circular
- guidance to Road Authorities in their role licensing road openings or making submissions to Planning Authorities
- Issued pro tem until the development of any procedures for the planning, regulation, construction and management of Medium, or High Voltage cables under public roads through the HV Forum or successor groups

**An Roinn Iompair** Department of Transport



14 March 2025

Circular RW 07 of 2025

'Electricity Transmission Infrastructure Development - Roads Sector Engagement Framework' and 'Interim Guidance'

Dear Chief Executive

The Government's 'Climate Action Plan 2024 - CAP 24', prepared under the 'Climate Action and Low Carbon Development Act 2015', as amended, sets out key targets for the electricity sector, including a requirement to "accelerate renewable electricity generation in order to reach 80% of electricity demand from renewable sources by 2030, through the expansion of onshore wind and solar energy generation, developing offshore renewable generation, and delivering additional grid infrastructure". To achieve this target 'CAP 24' states: -"All relevant public bodies will carry out their functions in a manner which supports the achievement of the renewable electricity targets, including, but not limited to, the use of road and rail infrastructure to provide a route for grid infrastructure where this is the optimal solution."

In recognition of the unique challenges presented by the accommodation of transmission network infrastructure in public roads, a "HV Forum' was established by key partners within the electricity (the Department of Environment, Climate and Communications, the Commission for Regulation of Utilities, EirGrid and ESBN) and the roads sector (the Department of Transport, Transport Infrastructure Ireland, the City and County Managers Association, Road Management Office and Local Authorities), for the purpose of establishing effective and efficient ways of working together to deliver on 'CAP 24' and support the development of high voltage electricity networks associated with the delivery of renewable energy generation, with due regard to mitigating and minimising potential impacts to public road where there use has been determined to be the 'optimal solution'.









### **Analysis**

### What?

### The interim guidelines

- Can be updated based on learning and experiences so feedback is helpful
- Apply to all rural roads (>60km/h) but elements are helpful for urban roads
  - Sections 6-9 particularly









#### **Analysis**

### What?

### The interim guidelines do not

- apply to new Transmission Network Projects developed by the TSO where the 'Electricity Transmission Infrastructure Development Roads Sector Engagement Framework' will apply.
  - Sections 6-9 of the interim guidance document will be relevant to the process
- apply to LV Distribution Cables installed by the DSO or DAO. Road licensing processes, as set out in the Guidelines for Managing Openings in Public Roads and TII CC-PAV-are applicable to those situations.

## Electricity Transmission Infrastructure Development

Roads Sector Engagement Framework

February 2025









### **Analysis**

### Who?

The following persons or bodies have powers to place MV/HV cables in the Public Road:

- 1. ESBN/ESB
- 2. EirGrid
- 3. Any person or body with site specific consent from the CRU under S.48 of the 1999 Electricity Regulation Act.
- 4. Any person or body with the agreement of **each and every landowner** who owns the substratum of the public road.









#### **Analysis**

## Evidence of Powers to open road and place HV cables

Where an application for consent is made to open the road this should be accompanied by evidence of the status as appropriate

Applications from agents, contractors etc. are not appropriate.

Authorisations to Construct issued							Report Generated on:		03 April 2025	
Гуре	Company Name	Address				Ref Auth	Power Station Address		Size (MW)	Issue Date
Battery										
	Scottish Power Renewables (UK) Limited	320 St. Vincent Street	Glasgow G2 5AD			Auth 2020/06-01	Barnesmore	Co Donegal	3.0	10/09/2020
	Avonbeg Storage Limited	Renewable Energy Systems Limited	Unit C1/C2 Willowbank Business Park	Millbrook, Larne	Co. Antrim BT402SF	Auth 2020/06-02	Killabeg, Ferns, Enniscorthy	Co. Wexford	17.6	10/09/2020
	Scottish Power Renewables (UK) Limited	320 St. Vincent Street	Glasgow G25AD			Auth 2020/07-04	Causestown, Stackallen, Navan	Co. Meath	52.8	26/11/2020
	ESB	Asset Development, 2 Gateway	East Wall Road	Dublin 3		Auth 2020/10-01	Aghada Power Station, Aghada	Co. Cork	19.0	27/01/2021
	ESB	Asset Development, 2 Gatway	East Wall Road	Dublin 3		Auth 2020/10-02	Inchicore 220kV Substation, Jamestown Road, Inchicore	Dublin 8	30.0	27/01/2021
	Energia Power Generation Limited	The Liberty Centre	Blanchardstown Retial Park	Dublin 15	D15YT2H	Auth 2020/11-01	Huntstown Power Station, Huntstown Quarry, Finglas	Dublin 11	10.0	18/02/2021
	Porterstown Battery Storage Limited	Apex, Block 5, Irish Life Centre,	Abeey Street Lower,	Dublin 1		Auth 2020/11-02	Porterstown, Kilteel,	Co. Kildare	30.0	18/02/2021
	Killala Community Wind Farm DAC c/o GR Windfarms 1 Limited	Riverside One	Sir John Rogerson's Quay	Dublin 2	D02 X576	Auth 2021/05-04	Tawnaghmore, Killala	Co. Mayo	13.7	27/10/2021
	ESB	Asset Development	2 Gateway	East Wall Road	Dublin 3	Auth 2021/08-01	Poolbeg Power Station, Pigeon House Road, Ringsend	Dublin 4	75.0	09/12/2021

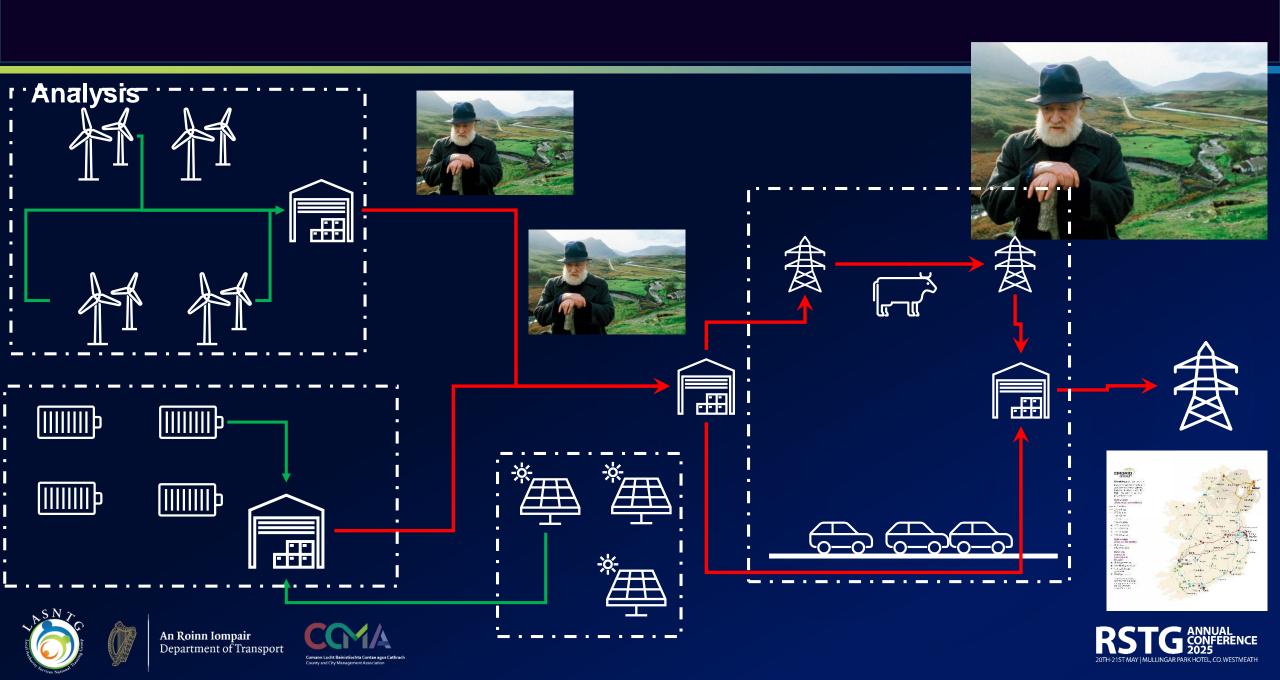


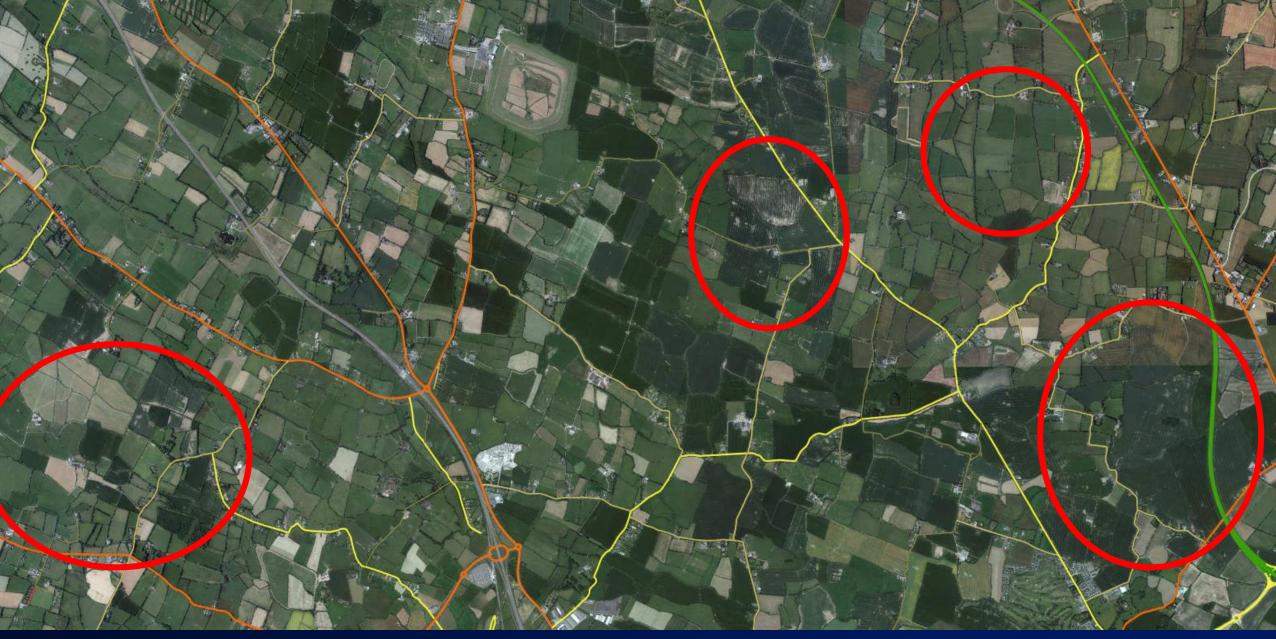










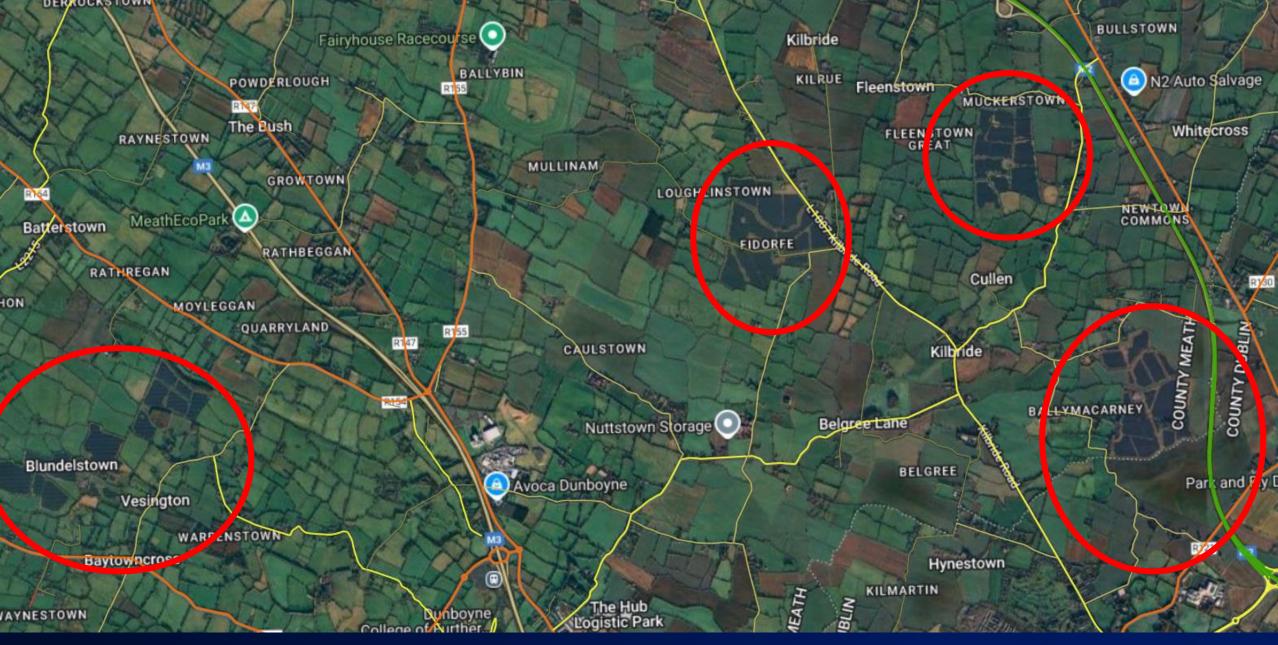






























#### **Analysis**

### When and How: Recommended Sequence

Roads Sector Engagement
Framework for Transmission
Network Projects fulfils this.

Discussion points for engagement

- •Route
  - Location of Joint bays
  - Structures
  - Have regard to section 7 of the interim guidelines

This engagement gives no authorisation to open the road, nor does it reserve a route or create an easement. The Pre-Application Engagement, including the agreement in principle, does not protect any route.

Planning Proces

S

Development is exempt

Consent by Planning Authority

Consent by ABP

May not apply to all projects if not evidence of planning exemption should be available

Notification

Roads Sector Engagement Framework for Transmission Network also be applicable to all other HV / MV Cables at an agreed future date.

Otherwise consideration as per the guidelines

Road Authority must be able to control the roadworks:

Reinstatement

Location

Structures / Drainage

Authority also requires

Records

**Operational Procedures** 

Construction Programme & Comms











**Board Direction** BD-019134-25 ABP-316372-23

- this file and the Inspector's report were considered at a Roard

SUBJECT:

ORDER:

mission generally in accordance with the Inspector's

Application Reg. Ref. No. 16/00256

een year permission to Contacte an underground electricity cable. The proposed underground electricity cable will be 38kV, will run predominantly within the public road corridor and is intended to connect the proposed Shehy More Wind Farm (Pl. Ref. 137551, An Bord Plenanla PLO4, 243486) to the National Grid via either the permitted substation at Garranareagh (Pl. Ref. 11/6605, An Bord Pleanala PL04.219620) or the currently proposed substation at Barnadivane (Kneeves) (Pl. Ref. 14/557, An Bord Pleanala PL04.244439). At time of lodging this application the proposed Shehy More Wind Farm and proposed substation at Barnadivane (Kneeves) remain under appeal with An Bord Pleanala.

Cloghboola, Cornery, Garryantomora, Tooreenalour, Gortnacarriga, Gortaknockane, Cooragreenane, Coolroc West, Carrignacurra, Dromnagapple, Teeranassig, ovle, Lisnacuddy, Reanacaheragh, Barnadiyano Conditional Permission is hereby GRANTED subject to the

ovision of Subsection 11 of Section 34 of the Planning and

Development Acts, 2000 - 2010 for the reason set out in the First Schedule attached hereto.

Shehy More Windfarm Ltd c/o McCarthy Keville O'Sullivan Block 1 GFSC Moneenageisha Road

The Permission is to be granted subject to the condition provided no appeal is made to An Bord Pleanála within the statutory time for the making of such appeals.

Blocksh Andre

shall be agreed and co-ordinated with statutory undertakers/landowners to

Reason: In the interest of clarity

Drainage arrangements, including the attenuation and disposal of surfu works in respect of both the construction and operation phases of the o

avoid conflicts prior to commencement of development. The final route of the proposed cable shall be notified to the planning authorities for written

Reason: In the interests of environmental protection and public health

- planning authorities and other relevant bodies for such works and serviappropriate. Such requirements shall require provision of a detailed Tri Management Plan and shall include the following details
- (a) Consultation with Transport Infrastructure Ireland and all private (b) Details of haulage routes, control measures for abnormally sized to
- and an Ahnormal I and Assessment (c) Detailed arrangements for construction damage to be made good in
- undertaker to the satisfaction of the planning authorities (d) Detailed arrangements for temporary traffic management/

protocols to keep residents informed.

NOW THEREFORE An Bord Pleanala, in exercise of the powers conferred or

it by section 5(3)(a) of the Planning and Development Act 2000, as amended hereby decides that the agricultural shed for the housing of cattle at Ardans,

County Donegal is development and is exempted development

Page 8 of 1

Planning and Development Acts 2000 to 2022

Board Order ABP-315843-23

Planning Authority: Donegal County Council

Planning Register Reference Number: 55 22/45

WHEREAS a question has arisen as to whether the construction of an agricultural shed consistent with the description, conditions and limitations w out in Class 6 of Part 3 to Schedule 2 of the Planning and Development Danegal for the housing of cattle is or is not development or is or is not

AND WHEREAS Declan Gallagher care of Joe Bonner Town Planning Consultant of The Airport Hub, Unit 1 Furry Park, Old Swords Road, Santry, Dublin, requested a declaration on this question from Donegal County Council, and the Council issued a declaration on the 19th day of December 2022 stating that the matter is development and is not exempted

AND WHEREAS Declan Gallagher care of Joe Bonner Town Planning Consultant of The Airport Hub, Unit 1 Furry Park, Old Swords Road, Santry Dublin referred this declaration for review to An Bord Pleanilla, on the 14th day of February 2023.

An Bord Pleanáb ABP-315843-23

ember of An Bord Pleanát duly authorised to authentical

**Analysis** 



following:

a. Consent of ABP

planning consent



**Planning Status?** 

Persons placing MV/HV cables in the

Public Road must also have one the

b. Consent of the Planning Authority

c. Demonstration of Exemption from



#### **Analysis**

### **Process-** Planning Consent

- Certain HV cabling and associated infrastructure in the public road are required to obtain consent through the
  planning process. It is essential that the Road Authority makes its submission to the Planning Authority
  or An Bord Pleanála (ABP) as appropriate during this process.
- The Road Authority's submission should:
  - A. Be consistent with the conditions of any agreement in principle reached at Pre-Application Engagement for T1 Notification
  - B. Have regard to minimum requirements for a T1 (and Child T2s) contained in the interim guidelines
  - C. Require adherence to the processes set out in the Guidelines for Managing Openings in Public Roads, published by the Department of Transport and administered by the Road Authority and the Road Management Office.









### **Analysis**

- Why?
- What?
- Who?
- When?
- Where?
- How?









### Analy Minimum Standards

The depth of cover to the Transmission HV cable duct(s) should be no less than 950mm to top of transmission cable (comms cables as existing standards) unless agreed otherwise in specific circumstances.

The horizontal alignment of the HV cable must be agreed with the Road Authority at the earliest possible opportunity.

Ground conditions along the route of the cable to be comprehensively assessed through detailed site investigations. This should occur pre-license application and may be the subject of a separate license application.











Where joint bays are proposed to be constructed in carriageways it shall be demonstrated that no off-carriageway alternative is practical.

Link boxes and C2 chambers should be installed off the carriageway.

- Depth of cover should be no less than 600mm unless agreed otherwise.
- Technical Acceptance shall be carried out in accordance with the requirements of DN-STR-03001, contact must be made with the TII Structures Section in the early phases of the project.









- Technical Acceptance of joint bay structures beneath regional and/or local roads in accordance with DOT Circular RW 10/2021.
- Joint Bays within the carriageway shall conform to standards required by the Roads Authorities
- shall have a concrete lid unless exceptional circumstances and agreed otherwise.
- Responsibility for the maintenance of Link
   Box / chamber lids remains with the Asset





### **Session 1:** Road Sector Overview, Interim Guideline

### **Analysis**

- High/medium voltage transmission underground cables should not be sited on or attached to existing roads structures
- When uncharted services or drainage infrastructure including culverts are discovered or damaged, the Road Authority must be consulted, and agreement reached in advance of proceeding.
- Cable location and alignment should be designed/installed/constructed in such a manner to not obstruct or interfere with road drainage systems and road existing drainage pathways.
- Consideration to be given to future necessary expansion for climate adaptation where envisaged as necessary by the Road Authority.









### **Analysis**

#### Reinstatement

- Backfilling and reinstatement of excavations to be in accordance with the DOT's Guidelines or, CC-PAV-04007 as appropriate.
- Additional ground improvement measures may be required, derived from the site investigations carried out.
- Where a regional or local road width is 6m or less, a full width of pavement reinstatement is required. This may include reconstruction of the binder, base and subbase on roads significantly impacted. In addition, certain roads may require additional strengthening in the form of geotextiles.







#### **Analysis**

### **Records & Safety File**

The licence holder shall provide as built details of all electrical infrastructure constructed in a format agreed with the Road Authority. Consideration should be given to ISO 19650 The License Holder shall provide a copy of the Safety File for the project.



### **Management procedures**

Prior to license issuing, the license holder shall agree procedures for the construction, operation and maintenance of the electrical infrastructure including emergency procedures (including contacts) during the operational lifetime of the asset.



#### Restrictions

Prior to issuing of a license the applicant shall declare and agree with the Road's Authority any restrictions of future construction work in the vicinity of the electrical infrastructure.











#### Analysis Existing Services

 Cable location and alignment to be designed in such a manner to not obstruct or interfere with existing utilities, without prior agreement from the existing utility owners.
 The Applicant shall consult with each utility

### **Exceptional Abnormal Load Requirements**

 A detailed submission of loads and proposed routes to be used for transportation of abnormal loads along with details of the load is to be submitted to Road Authority for agreement in advance of planning consent or granting of a license.

### **Construction Programme**

A draft construction programme should be submitted for the approval of the Road Authority.





### **Analysis**

### **Traffic Management**

The number of Traffic Management setups and programme to be pre-approved by the Road
Authority and taking due consideration of traffic volumes, and to minimise the number and
sequencing of Traffic Management set-ups along the host road. This should include a detailed
traffic study of all roads and junctions including diversion routes impacted by the proposed works.

### **Communications**

• The Applicant shall have regard to the construction of any other infrastructure and coordinate with that person the timing of their works and the future maintenance of their infrastructure.

### **Ownership**

 The applicant shall provide the Road Authority with contact details of the owner of the infrastructure annually throughout its life or when any changes in ownership occur.









#### **Analysis**

### **Future infrastructure development**

- The applicant shall not install infrastructure (including structures, cables, or wires) along an existing Public Road where it is known that this Public Road is to be abandoned.
- The provision of infrastructure (including structures, cables, or wires) along the alignment
  of a future Public Road shall be coordinated with the construction of that road.

### Security

 The applicant shall provide the Road Authority with a cash security to ensure the satisfactory reinstatement of the public road.

### Certification, coordination and Inspection

 The applicant shall agree arrangements with the Road Authority for certification and inspection of the works that may include direct inspection / coordination by the Road Authority. The Road Authority may include specific charges for same.









### **Analysis**

### Next Steps

- Implement HV Forum's recommendation for Central Supports
  - Funding
  - Joint Electricity / Transport Group
  - LA support unit
  - Project Specific teams
- Obtain Feedback on Interim Guidence
- Develop enduring standards and processes to update interim guidance









**Analysis** 

Stephen Flynn

## THANK YOU











**Analysis** 

Join the Q&A session at Slido.com and enter 3873601 or via the QR Code. Questions must include name and associated Local Authority to be considered by the panel.









