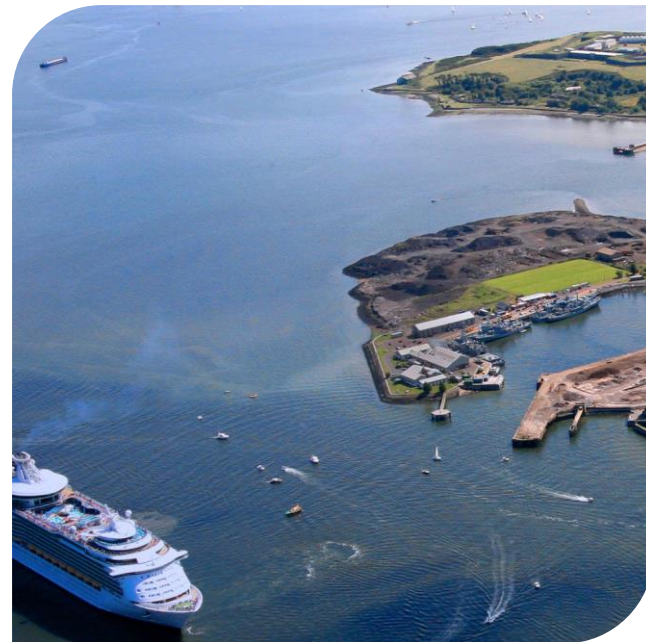


# The Story of Ireland's Water

Eamon Gallen  
Duane O'Brien



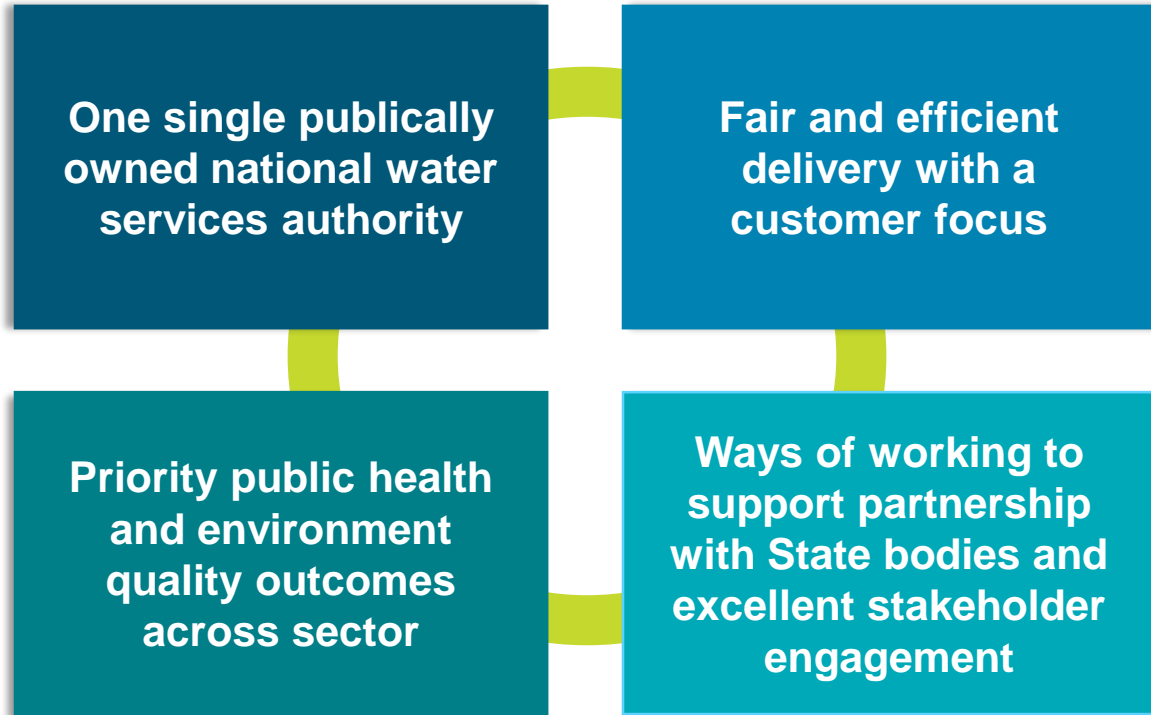
# Everyone who works in the water services industry today is working towards the same vision for Ireland's water services

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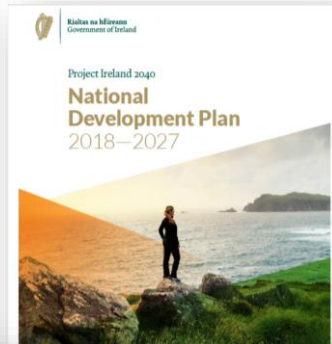
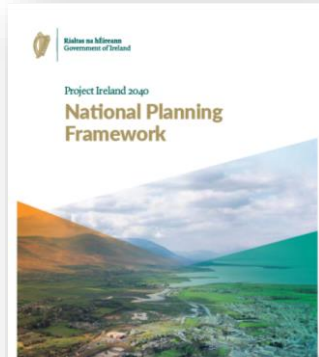
- Clean, safe drinking water for everyone, to the same consistent standard
- Return wastewater safely to our environment
- Protect our environment
- Enable economic and social development



# Water Services Policy Statement focuses on 4 Key Principles



# Government policy on water is very clearly defined and mirrored in all Irish Water policy documents



25 Year  
Strategic Plan



7 Year  
Business Plan

# We currently deliver 1.7 billion litres of treated water every day...

..to Irish homes

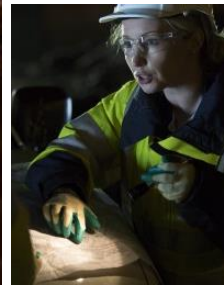


..and Irish businesses

...managing over 7,000 individual assets,  
many of which are not fit for purpose...



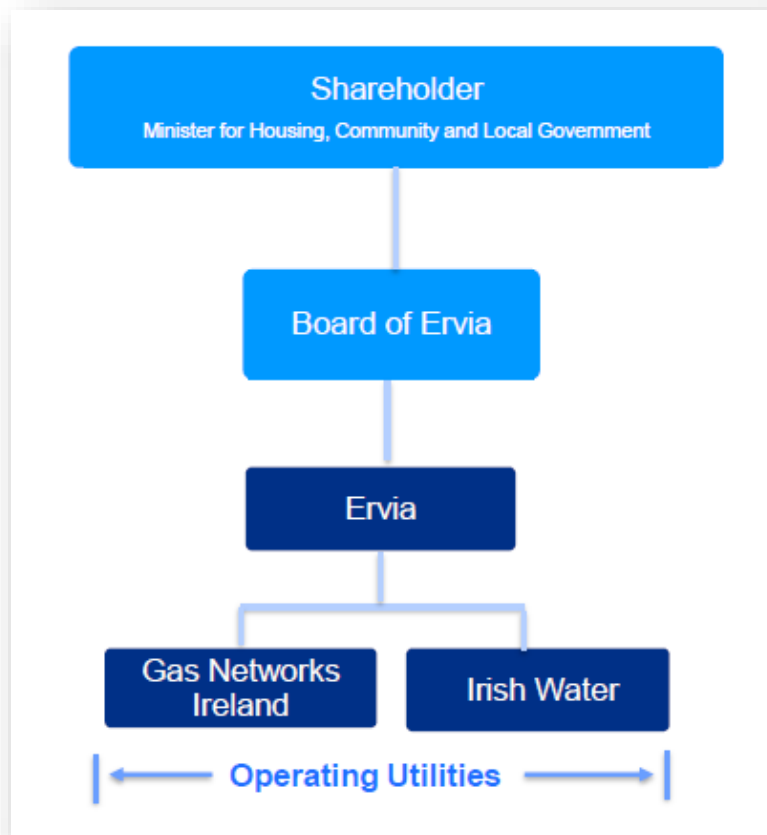
# ...with 88,000km of water and wastewater pipe to manage 24/7, including leaks...



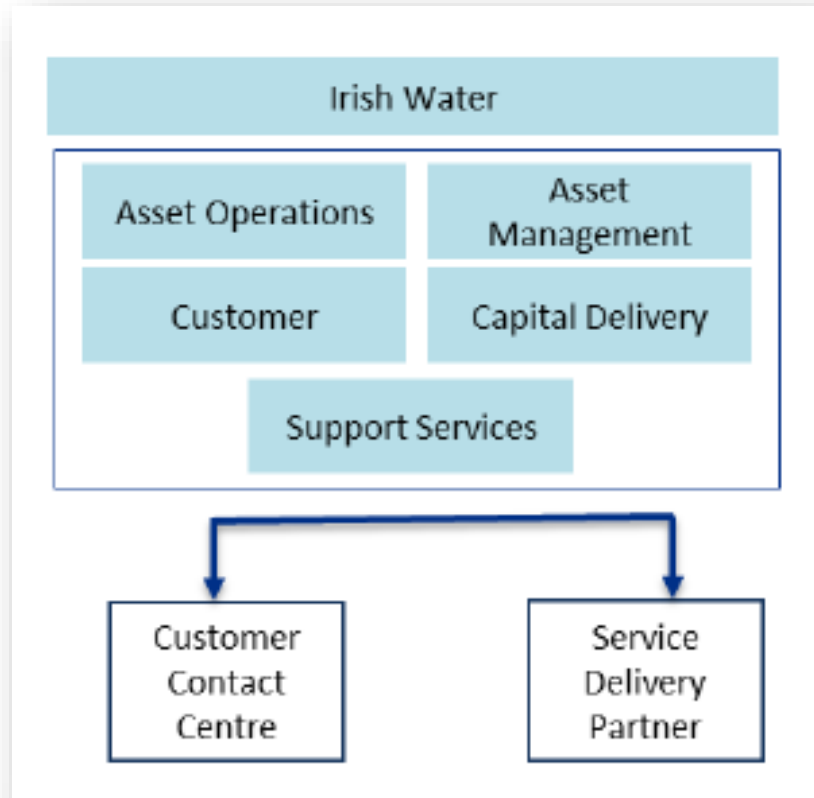
# ...while Ireland's demand for water services is growing significantly



# This is how we are structured...



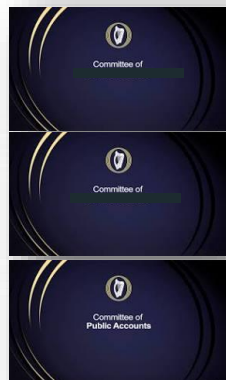
# ...and this is how we currently operate...



# ...with extensive and important oversight bodies...



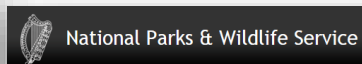
NewERA



Joint Oireachtas Committee on  
**Housing Planning & Local  
Government**

Joint Oireachtas Committee on  
**Future Funding of Water  
Services**

Committee of  
**Public Accounts**



## ...and staff based around the country...



<b>East/Midlands Region</b>	Dublin City
	Mullingar
<b>West/North West Region</b>	Castlebar
	Cavan Town
	Donegal Town
<b>Southern Region</b>	Mallow
	Limerick City
	Kilkenny City

# ...to deliver Irish Water Business Plan's key objectives



We will invest €5.5b in Ireland's Infrastructure to protect public health and the environment between 2014-2021.



We will work with our Local Authority partners to transform the water industry into an effective and efficient modern water utility.



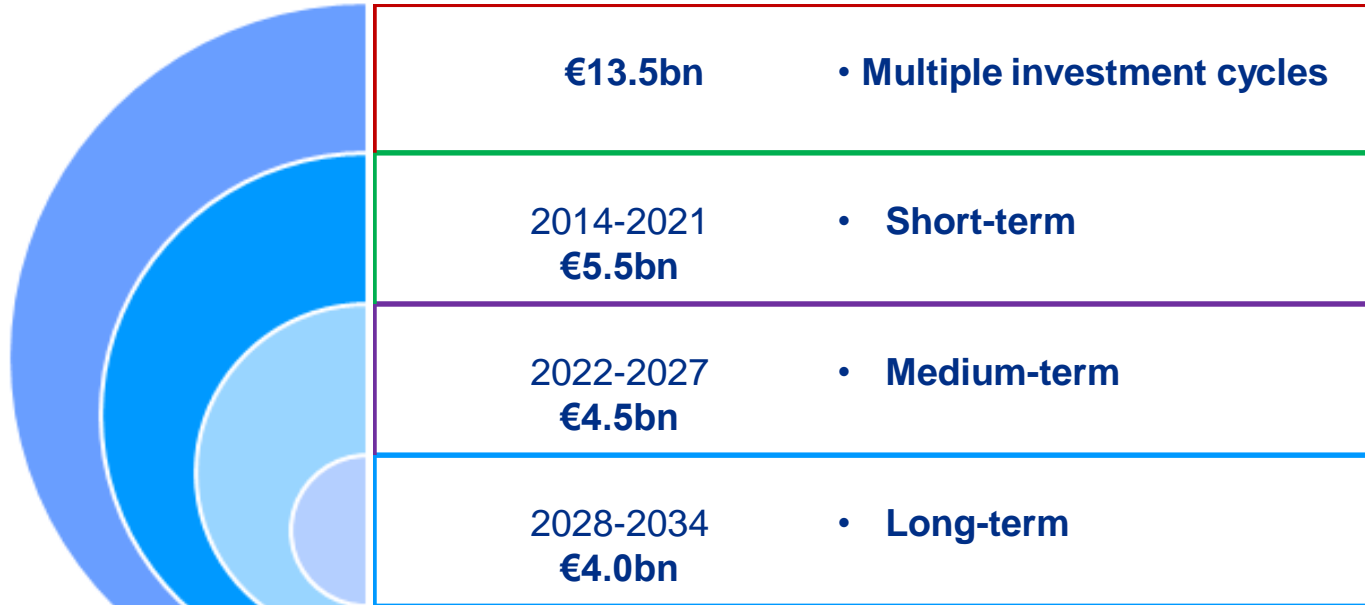
We will achieve operational excellence realising €1.1b of cumulative operating efficiencies by 2021.

# How we prioritize investment

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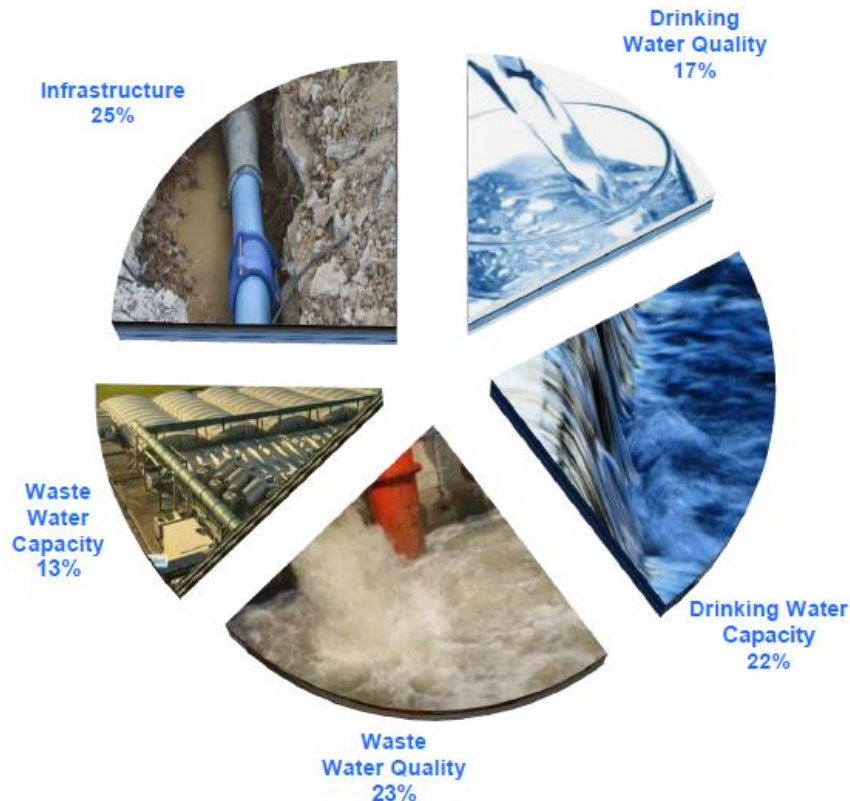
- We use **operational information** to help to decide when and where to upgrade pipes and develop infrastructure.
- This is based on **risk assessment** which looks at :
  - the condition of the asset, its age and pressure;
  - the scale of customer impact such as number of people affected, if big businesses or hospitals are on that network; and
  - supporting social and economic growth.
- The overall **scale of funding** is a matter for government having regard to the assessment of needs by Irish Water.

# We have estimated it will take many investment cycles to address our water and wastewater issues



# Between 2014-2021, we will invest as follows to address the most urgent issues

Capital Investment Plan to 2021	
Drinking Water Quality	€950m
Drinking Water Capacity	€1,250m
Waste Water Quality	€1,250m
Waste Water Capacity	€700m
Infrastructure	€1,364m
<b>Total</b>	<b>€5,514m</b>



# 2014-2016, we have already invested €1.7 billion

...and this is how Ireland has benefitted to date

## Drinking Water

- Boil Water restriction lifted from 145,000 people
- 70 reservoirs cleaned and refurbished
- 840km of new or replaced mains, further 1,000km targeted
- 9 new water treatment plants delivered, 18 upgraded
- 247 Pressure Reduction upgrades reducing leakage
- 880,000 domestic meters installed

## Waste Water

- 32 waste water plants upgraded and 27 new plants built
- 350 flow monitoring and sampling sites upgraded
- 436 Plant Optimisation audits and 2,000 improvement recommendations
- 25 priority source control projects to resolve wastewater overloading

## Other Efficiencies

- 600 disinfection plants assessed and works commenced
- Over 10,800 Urgent H&S addressed
- 73 Energy Reduction Schemes

# These are our continuing Strategic Priorities to 2021

Capital Maintenance  
(Asset Replacement)

Sewer Flooding

Water Pressure

## Water

- Microbiological (BWN & BWN Risk)
  - Lead
  - Remedial Action List (RAL)
  - Trihalomethanes (THMs)

## Wastewater

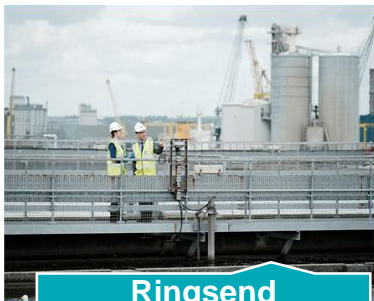
- ECJ / UWWTD Treatment
  - 44 Locations (2014) with no treatment
- Licence Compliance

Reduce  
Leakage

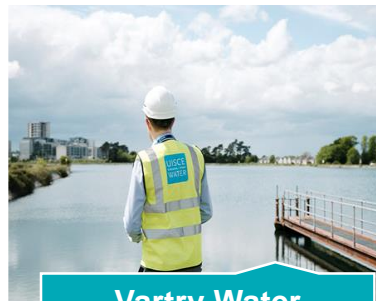
Resilience &  
Headroom

Efficient provision for  
Growth (Housing)

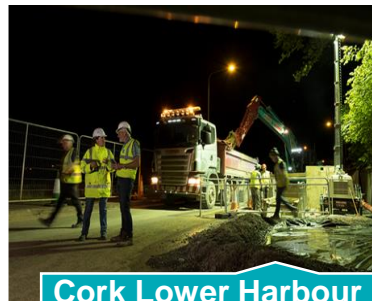
# We are making significant investment in large scale critical infrastructure



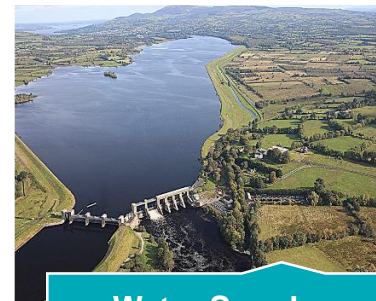
**Ringsend  
Wastewater  
Treatment Plant**



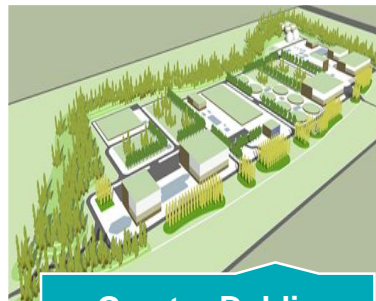
**Vartry Water  
Supply Project**



**Cork Lower Harbour  
Main Drainage  
Scheme**



**Water Supply  
Project.**



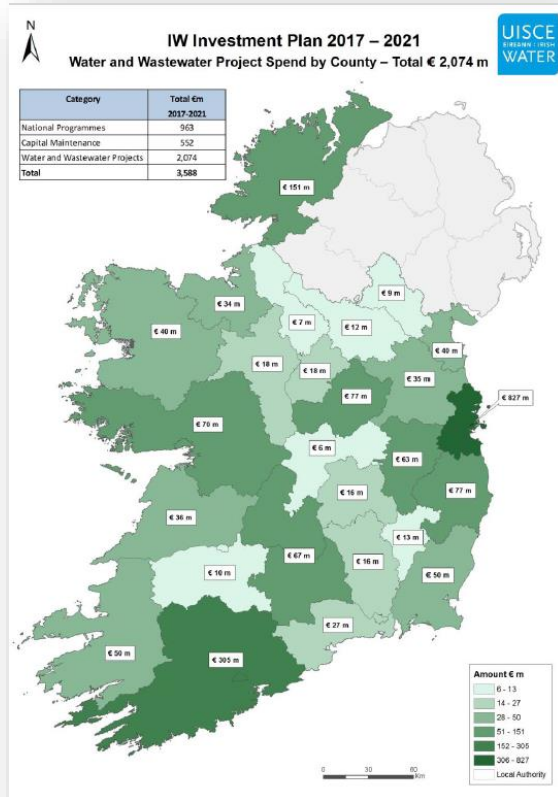
**Greater Dublin  
Drainage Scheme**



**Regional Biosolids  
Storage Facility**

# Irish Water in the Southern Region

# Proposed Water and Wastewater project spend to 2021



Category	Total €m 2017-2021
National programmes	963
Capital Maintenance	552
Water and Wastewater Projects - Estimated total spend 2017-2021	2,074
<ul style="list-style-type: none"> <li><b><i>Of which estimated spend in Southern Region is €574m</i></b></li> </ul>	
<b>Total</b>	<b>3,588</b>

# Water Activities in the Southern Region



## Water Quality

72 Schemes on Qtr1, 2018 RAL nationwide  
40 Schemes in Southern Region serving 254,224 population  
Irish Water target is for 19 schemes on RAL end 2018, 4 Schemes on RAL end 2019 and 0 schemes on RAL end 2020

## Leakage Reduction

### National Leakage Reduction Programme (launched 2017)

Water mains replacement underway in counties Carlow, Cork, Kilkenny, Tipperary and Waterford. Leak detection and Find and Fix underway in Clare & Tipperary and lead replacement in Limerick and Waterford.

### First Fix Scheme: (30/06/2017)

40,268 customer notifications issued southern region  
37.13 million litres of water saved every day in southern region



## National Programmes

National Disinfection  
Reservoir cleaning  
Dam inspections  
Process Optimisation at treatment plants  
Lead in Drinking Water Programme – orthophosphate treatment in Clareville

# Waste Water Activities in the Southern Region



## Waste Water Quality

Irish Water is progressing priority projects to address the agglomerations in your region that are currently discharging wastewater without treatment.

These include:

**Clare:** Ballyvaughan, Clarecastle, Kilkee, Kilrush, Liscannor

**Cork Lower Harbour:** Cobh, Passage West/Monkstown, Ringaskiddy Village, Ringaskiddy/Crosshaven/Carrigaline

**Cork:** Ballycotton, Castletownbere, Castletownsend, Courtmacsherry/Timoleague, Inchigeelagh, Whitegate, Youghal

**Waterford:** Ardmore, Dunmore East

**Wexford:** Arthurstown, Ballyhack, Duncannon, Kilmore Quay

## National Programmes

Process Optimisation at Wastewater Treatment Plant

Critical Sewer Survey Programme

National Wastewater Sludge Management Plan



## Sample Projects

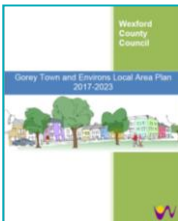


New WWTP commissioned in Cork Lower Harbour

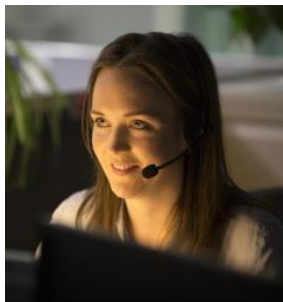
Other projects include Carlow WWTP, Ballyvaughan WWTP, Ennistymon WWTP, Bandon WWTP, Kenmare WWTP, Mullinavat WWTP, Adare WWTP, Castletroy SS, Ballina SS, Nenagh SS, Passage East SS, Enniscorthy SS

# Other Activities in the Southern Region

## Supporting Regional and County Development



Supporting Regional Spatial and Economic Strategies (to be finalised in 2018) as well as ongoing reviews of County Development Plans and Local Area Plans



## Supporting Customers

Contact centre available 24/7 365 days – 76% first contact resolution  
Customer Charters – set service levels  
Vulnerable Customer register and services  
Non-domestic customers transferred  
New connections policy  
New Connections and Developer Services with regional support  
Non-Domestic Tariff Framework Review underway by CRU

## Supporting Incidents and Outages

Executing National Emergency Plans with the LAs during Storm Ophelia and Storm Emma  
Average week – 80 reported outages by LAs, with approx. 40,000 premises affected. Burst mains highest driver of outages.



# Example projects in Southern Region



**Thank you for  
your time**

**Questions?**