

LOCAL AUTHORITY ROADS CONFERENCE and EXHIBITION – 2017

SAFER ROADS

Invasive Alien Plant Species on the National Road Network: A National Treatment Programme

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Ecologist

Transport Infrastructure Ireland



An Roinn Iompair
Turasóireachta agus Spóirt
Department of Transport,
Tourism and Sport

Why are IAPS such a Problem?

- ❑ Non-native, no natural predators
- ❑ Very rapid growth, tenacious root systems
- ❑ Outcompete native vegetation, implications for native biodiversity



Photos Courtesy of Fiona Patterson, Arup

Implications for TII development

- ❑ Implications for all major and minor works, including Pavement Improvement Schemes, Safety, Sign and Lines, Bridge Maintenance, PPP, MMaRC contracts etc.,
- ❑ Potential to damage buildings, light rail and road foundations, bridges etc.,
- ❑ Liability for spreading, hedge cutting, upgrade works etc.,
- ❑ Implications for contracts, costs, earthwork delays etc.,
- ❑ Where consents are in place for road improvements works, need advanced contracts to remove IAPS



Media Coverage

Independent.ie 

This invasive plant can grow through concrete walls and wipe out the value of your house in just months

Garden Special: Japanese Knotweed is an invasive species that can wipe out the value of your house in a few short months. Tanya Sweeney reports on a plant that is taking hold in Ireland.

THE IRISH TIMES
Let's give Japanese knotweed invader its just desserts
Knotweed shoots taste like rhubarb and useful for jam - FF's Cllr John Joe Culloty

Independent.ie 
Knotweed - a growing curse on the countryside

 **Irish Examiner**

West Cork town under siege from Japanese weed

thejournal.ie
READ, SHARE AND SHAPE THE NEWS

Cork social housing project delayed over Japanese knotweed

Independent.ie 
Council 'at war' with knotweed

 **Irish Examiner**
Call for national taskforce as Japanese knotweed delays housing project

Media Coverage



€5.5m to tackle knotweed on roads; Multi-phase project 'will take years' to eradicate invasive plant

“Transport Infrastructure Ireland has unveiled a €5.5m war-chest aimed at stopping the spread of Japanese knotweed on the country’s national road network.”

National Treatment Programme

Stage 1: Pilot Research Programme 2015

- Data Collection in 2 Pilot Counties
- Pilot Treatment Programme N70 Kerry



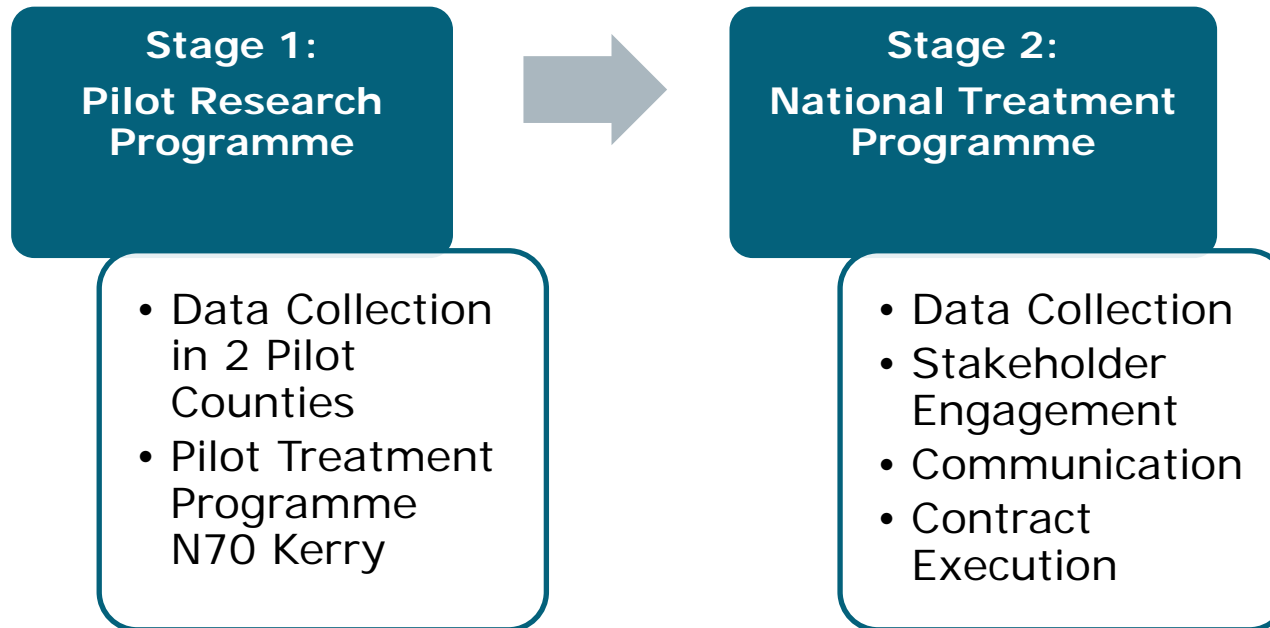
National Treatment Programme

Stage 1: Pilot Research Programme 2015

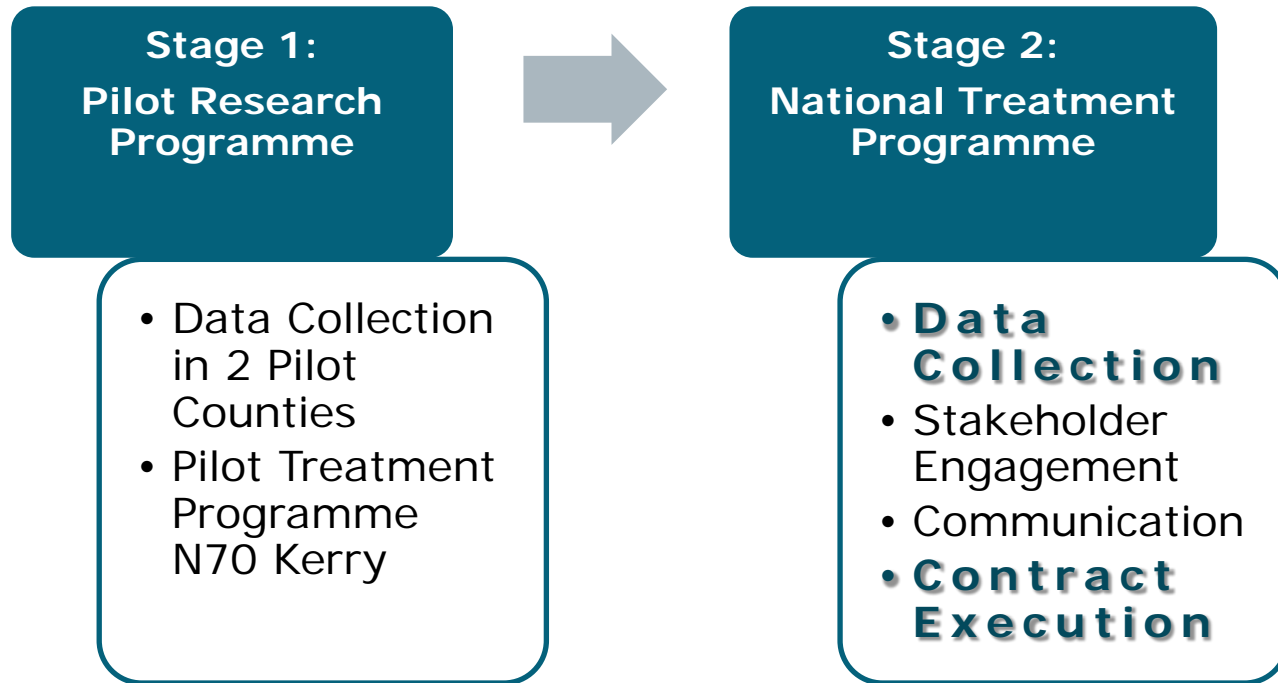
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National Treatment Programme



National Treatment Programme



Contract Execution – Overview

Market Consultation

Information Memorandum and Pre-
Qualification Questionnaire (Stage 1)

Framework Agreement (Stage 2)

Call-Off Contracts

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Contract Execution – Market Consultation

- ❑ Very few contracts created by public or private bodies to deal with IAPS
- ❑ The aim of Market Consultation was:
 - Determine what sort of contractors could carry out such work
 - Flag to the market that such future work was possible
 - Prompt contractors to start networking with relevant experts

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Contract Execution – Pre-Qualification (Stage 1)

- ❑ Pass/Fail criteria include:
 - Financial & economical standing
 - Experience and technical capacity
 - **Resources and sub-contractors/consultants:**
 - ❑ health and safety manager,
 - ❑ competent person,
 - ❑ 2 registered professional users,
 - ❑ ecologist or horticulturalist,
 - ❑ GIS technician and land surveyor.
 - **Safety and Health:**
 - ❑ Competent to fulfil the roles of PSDP, PSCS and Works Contractor.

Contract Execution – Overview

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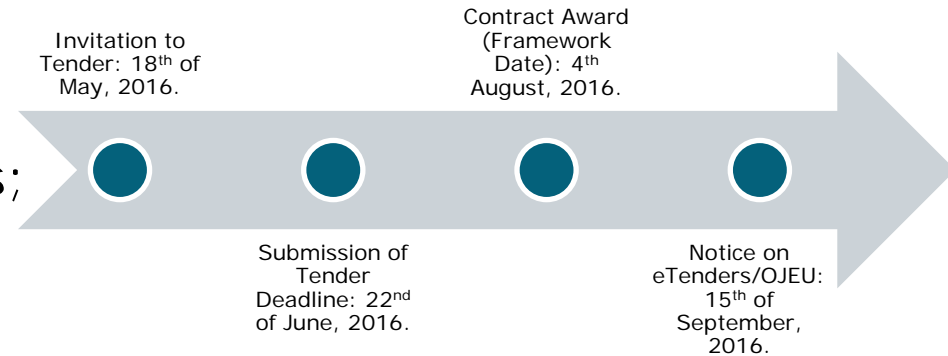
Framework Agreement (Stage 2)

Call-Off Contracts

Contract Execution – Framework Agreement (Stage 2)

□ Six documents sent to shortlisted Tenderers:

- Instructions to Tenderers;
- Specimen Works Requirements;
- Specimen Works Drawing;
- Form of Tender;
- Pricing Document; and,
- Framework Agreement.



Contract Execution – Framework Agreement (Stage 2)

- Specimen Works Requirements and Drawing: 'To assist Tenderers in preparing their Quality Submission and Pricing Document'
- Specimen Works Requirements:
 - Communication with Adjacent Landowners;
 - Surveying;
 - Geographic Information Systems and Reporting;
 - Signing knotweed infestations;
 - Traffic Safety and Management;
 - Eradication of IAPS; and,
 - Carrying out role of PSDP and PSCS.



Contract Execution – Framework Agreement (Stage 2)

Definition of 'eradication'

The term 'eradication' means the complete removal of Japanese and other knotweed species and *Gunnera tinctoria* within a three year period.

Whether 'eradication' of Japanese and other knotweed species and *Gunnera tinctoria* has been achieved will be determined after the growing season in the fourth year has finished.

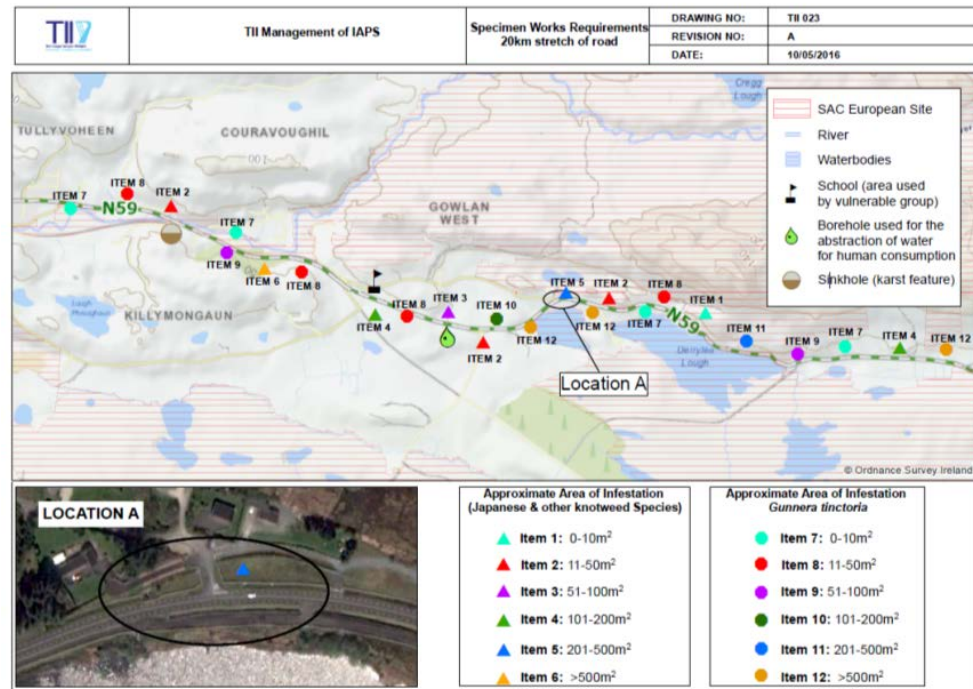


**Himalayan knotweed on N59
Moycullen Bypass**



Framework Stage 2

- Significant regulation on the use of pesticides
- Areas where there are restrictions on the use of pesticides include:
 - Water bodies, rivers
 - Residential areas
 - Sensitive habitats
- References to these in the Specimen Works Drawing- determine Tenderer's knowledge in Quality Submission



Specimen Works Drawing

Contract Execution – Framework Agreement (Stage 2)

- Participants had to provide:
 - Fully completed suite of documents and evidence to support the educational and professional qualifications of key personnel

- 30% Price and 70% Quality

- 15 Framework Participants

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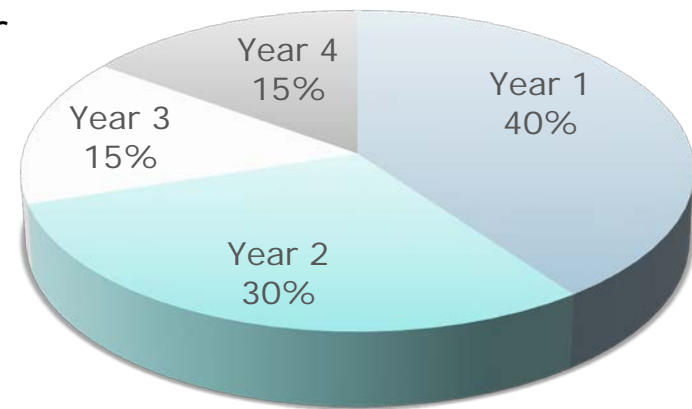
Contract Execution – Call-Off Contracts

- ❑ NROs, POs, Local Authorities
- ❑ Creation of suite of template documents
- ❑ Quickly adapted and tailored to create call-off contracts in individual LA areas
 - Aide Mémoire;
 - Deed of Adherence;
 - Information Pack;
 - Instructions to Tenderers;
 - Invitation to Tender;
 - Preliminary Health and Safety Plan;
 - Volume A – Works Requirements;
 - Volume B – Tender and Schedule; and,
 - Volume C – Pricing Document

Contract Execution – Call-Off Contracts

Payment Schedule

- Spread over 4 years
- Ensure treatment is continued over the contract period
 - Year 1: 40% of Call-Off Contract.
 - Year 2: 30% of Call-Off Contract.
 - Year 3: 15% of Call-Off Contract.
 - Year 4: 15% of Call-Off Contract



National Treatment Programme

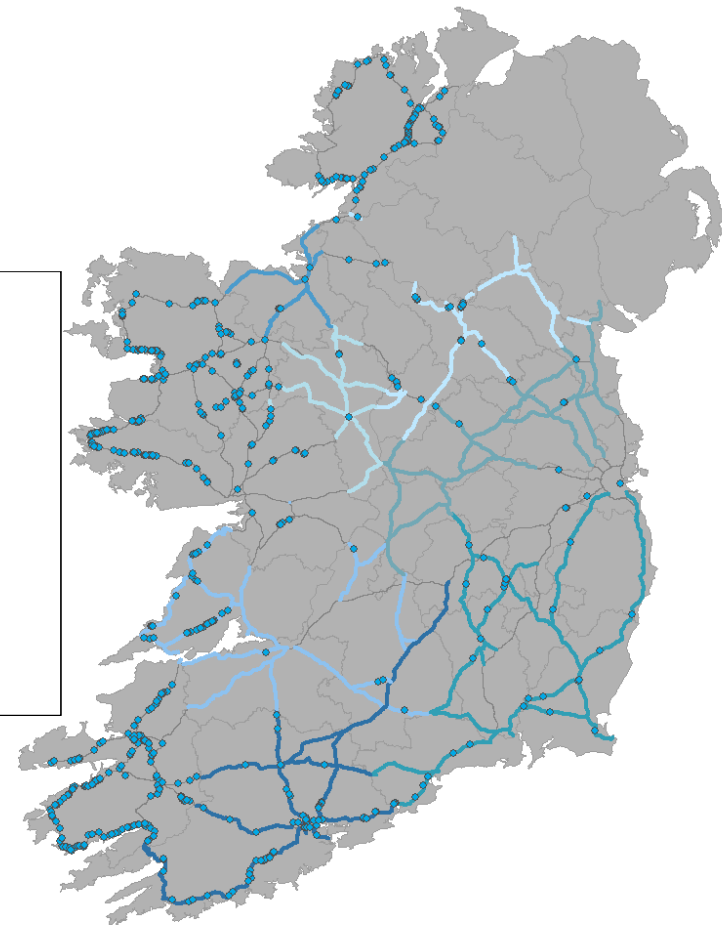
Stage 2: National Treatment Programme

- **Data Collection**
- Stakeholder Engagement
- Communication
- Contract Execution

Data Collection

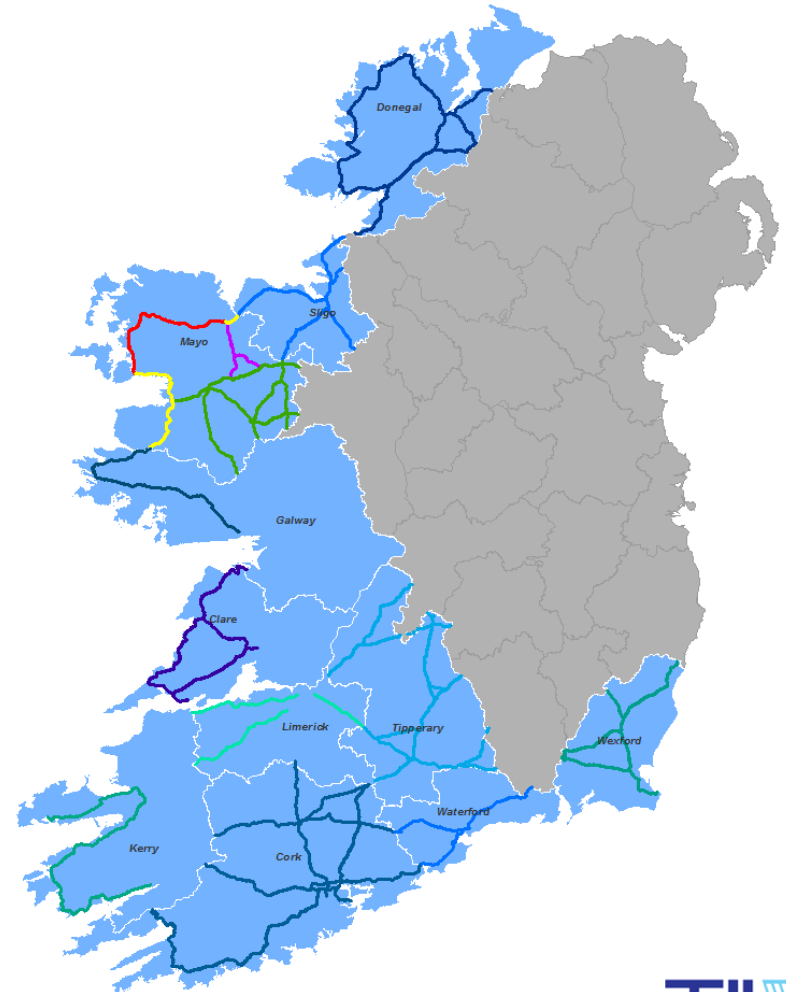
NRO/ PO Data Collection

- ❑ May/June 2016
- ❑ Clarify data collected to date
- ❑ Help inform lots for call off contracts based on quantities
- ❑ Counties were divided up into P1 and P2 to prioritise treatment



Contract Execution – Call-Off Contracts 2016

- ❑ 11 Priority 1 Counties:
- ❑ Donegal, Sligo, Mayo, Galway, Clare, Tipperary, Limerick, Kerry, Cork City & County, Waterford and Wexford.
- ❑ 5 different successful Contractors in 2016
- ❑ N59 Galway
- ❑ N70, N86 Kerry



IAPS Extents, Treatment & Re-Growth Tracking

□ Works Requirements

- Phase 1: Data Validation Survey
- Phase 2: Full Survey of infestations (Yearly)
- Phase 3: Treatment (Yearly)
- Phase 4: Re-growth survey (Yearly)

□ GIS Database:

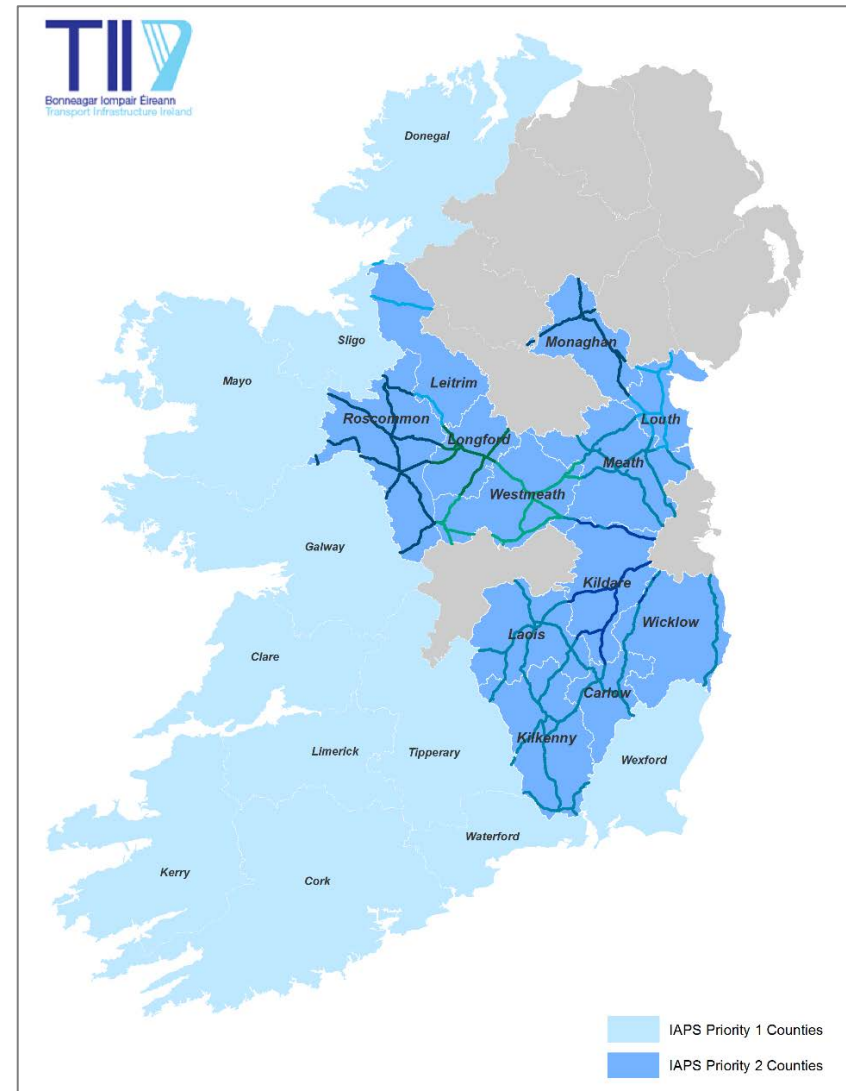
- Track programme success
- Inform future works/schemes

Contract Execution – Call-Off Contracts

Future Work:

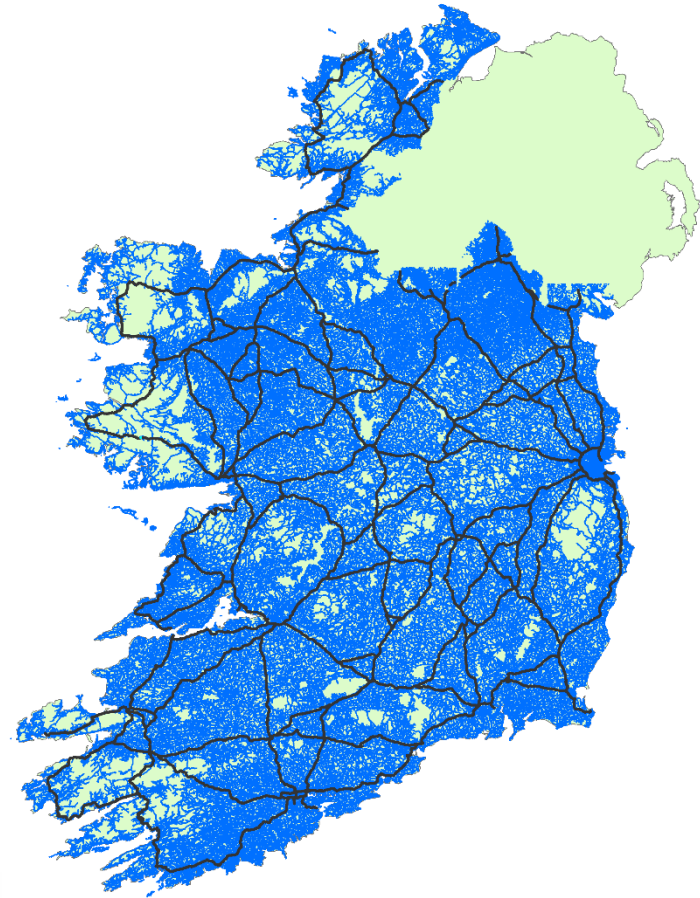
- Call-Off Contracts for national roads in Priority 2 Counties in 2017
 - Lessons Learned Exercise P1 Counties
 - Section 85 Agreements: Managed by Roscommon CoCo, Kildare CoCo, Westmeath CoCo, facilitated by national road offices

- Galway & Kerry: remaining routes



Contract Execution – Call-Off Contracts

- Engaging with DTTAS throughout this process
- Very little data on IAPS on regional roads
 - 2017 Priority 2 Call-Off Contracts will include the survey of a regional road in each Section 85 area
 - May be able to vary these 2017 contracts to include further regional road surveys based on the survey prices received from contractors
 - Information gathered from these surveys of regional roads would assist us in creating call-off contracts for the treatment of IAPS in the future on regional roads





Roscommon County Council
Comhairle Contae Ros Comáin

Contract Execution – Contributors



Comhairle Chontae na Gaillimhe
Galway County Council



Cork
County Council
Comhairle Contae Chorcaí



SLIGO COUNTY COUNCIL



Comhairle Contae
Dhún na nGall
Donegal County Council



Longford
County
Council



Kildare County Council
Comhairle Contae Chill Dara



cork
national roads office



Cork
City Council
Comhairle Cathrach Chorcaí



Mid West
National Road Design Office



Comhairle Contae an Chláir
Clare County Council



Kerry County Council
Comhairle Contae Chiarraí



Kerry NRDO
National Road Design Office
Oifig Deartha um Bóithre Náisiúnta Chiarraí



Comhairle Contae Thiobraid Árann
Tipperary County Council



Kildare County Council
Comhairle Contae Chill Dara



WESTMEATH COUNTY COUNCIL
Comhairle Chontae na hIarmhí



Comhairle Cathrach
& Contae Phort Láirge
Waterford City
& County Council



comhairle chontae na mí
meath county council

Thank you

ROADS Services Training Group

TII Colleagues: Christian Nea & Dr. Vincent O'Malley

Colleagues in the Department of Transport