eGOVERNMENT & LOCATION

BRUCE McCORMACK
President, IRLOGI

PRESENTATION TO THE EUROGI MEMBERS MEETING
SALERNO, ITALY
26 APRIL 2018
AIM OF THE PRESENTATION

TO RAISE AWARENESS IN THE GI COMMUNITY OF THE IMPORTANCE OF eGOVERNMENT AS A DOMAIN WITHIN WHICH LOCATION IS/CAN BE AN KEY FEATURE
WHAT IS eGOVERNMENT

• LOTS OF DEFINITIONS ……
• BASICALLY – INTERACTION BETWEEN GOVERNMENT (AT ALL LEVELS) AND CITIZENS AND BUSINESSES THROUGH THE USE OF THE INTERNET
• CAN INCLUDE INTER & INTRA-GOVERNMENT INTERACTIONS
THE OLD DAYS

PAPER
QUEUES
08:00 – 13:00 / 14:00 – 17:00
23 JACOBS STREET

eGOVERNMENT

24/7
1s & 0s
VARIETY OF DIGITAL DEVICES
THE INTERNET

IT’S A VERY DIFFERENT WORLD
A FEW (very few) eGOVERNMENT ON-LINE SERVICE EXAMPLES

• VOTING
• REGISTERING A BUSINESS
• CITIZEN CONTRIBUTIONS TO DRAFT ZONING PLANS
• FIX MY STREET
• WHERE ARE THE PIPES UNDER THE GROUND
• OBTAINING BIRTH CERTIFICATES
• DIRECT PAYMENTS OF WELFARE BENEFITS
• CITIZEN INFORMATION ABOUT MANY ASPECTS OF GOVERNMENT POLICIES AND PRACTICES
• PAYING TAX
• Etc etc etc etc etc etc
BENEFITS OF eGOVERNMENT

• IMPROVED EFFICIENCY ... SAVE MONEY & TIME
• INCREASED TRUST IN GOVERNMENT
• IMPROVED ACCOUNTABILITY BY GOVERNMENT
• MORE CONVENIENCE FOR CITIZENS/BUSINESSES
• BETTER DEMOCRACY THROUGH MORE INFORMED CITIZENRY AND DIRECT CITIZEN INPUTS INTO DECISION-MAKING
• BETTER POLICY MAKING WITHIN GOVERNMENT
• LESS CORRUPTION
• ENVIRONMENT BENEFITS ... less travel
• MORE RESPONSIVE GOVERNMENT
BROAD CONTEXTS FOR eGOVERNMENT

• UNITED NATIONS .................. SUSTAINABLE DEVELOPMENT
• EUROPEAN UNION ................. DIGITAL SINGLE MARKET
• IRELAND ................................ PUBLIC SECTOR REFORM
eGOVERNMENT IN A GLOBAL CONTEXT
(UN eGovernment global survey 2016)
eGOVERNMENT OVERALL INDEX (0.0 – 1.0)

0.7241 ... EUROPE
0.5245 ... AMERICAS
  0.5132 ... ASIA
0.4154 ... OCEANIA
0.2882 ... AFRICA

0.4922 ... WORLD
## EU COUNTRIES IN AN eGOVERNMENT GLOBAL CONTEXT
*(UN eGovernment global survey 2016)*

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<thead>
<tr>
<th>TOP 10 ... by global rank</th>
<th>BOTTOM 10 ... by global rank</th>
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<tr>
<td>• UK ... 1</td>
<td>• Romania ... 75</td>
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<td>• Netherlands ... 7</td>
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<td>• Croatia ... 37</td>
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<td>• Belgium ... 19</td>
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THE EU POLICY CONTEXT (1)

• LOTS OF DIMENSIONS .......
• eGOVERNMENT ACTION PLAN 2016 -2020
  ○ VISION

By 2020, public administrations and public institutions in the European Union should be open, efficient and inclusive, providing borderless, personalised, user-friendly, end-to-end digital public services to all citizens and businesses in the EU. Innovative approaches are used to design and deliver better services in line with the needs and demands of citizens and businesses. Public administrations use the opportunities offered by the new digital environment to facilitate their interactions with stakeholders and with each other.
THE EU POLICY CONTEXT (2)
EU eGOVERNMENT ACTION PLAN 2016-2020

• PRINCIPLES
  o DIGITAL BY DEFAULT
  o ONCE ONLY
  o INCLUSIVENESS & ACCESSIBILITY
  o OPENNESS & TRANSPARENCY
  o CROSS BORDER BY DEFAULT
  o INTEROPERABILITY BY DEFAULT
  o TRUSTWORTHINESS & SECURITY
‘There is a growing demand from business and citizens to have access to high quality, interoperable and re-usable data to provide new services, in particular the area of spatial data.’ (p11)

‘The use of spatial data for urban, land-use, traffic planning and for scientific purposes can unleash new innovations that respond to societal needs such as reducing the negative impact on the environment.’ (p11)

Will focus on INSPIRE .....  

‘This will improve the evidence based policy making and support eGovernment processes where high quality spatial data (e.g. cadastres, maps, addresses, buildings, parks, protected sites, natural risk zones, etc.) is needed.’ (p11)
IRELAND POLICY CONTEXT (1)

• eGOVERNMENT STRATEGY 2017 - 2020

• STRATEGY SITS IN A BROADER POLICY CONTEXT
  o EU eGOVERNMENT ACTION PLAN 2016 - 2020
  o IRISH PUBLIC SERVICE RENEWAL PLAN 2014
  o IRISH NATIONAL ACTION PLAN 2016 – 2018
  o IRISH PUBLIC SERVICE ICT STRATEGY
  o etc
IRELAND POLICY CONTEXT (2)
eGOVERNMENT STRATEGY 2017 - 2020

• VISION
  • “… To be open, flexible and collaborative with our citizens and businesses, using digitisation and technology to increase efficiency and effectiveness and constantly improve public services

• PRINCIPLES .... same as EU eGovernment Action Plan 2016 - 2020
  • DIGITAL BY DEFAULT
  • ONCE ONLY
  • INCLUSIVENESS AND ACCESSABILITY
  • OPENNESS AND TRANSPARENCY
  • CROSS-BORDER BY DEFAULT
  • INTEROPERABILITY BY DEFAULT
  • TRUSTWORTHYNESS AND SECURITY
IRELAND POLICY CONTEXT (3)
eGOVERNMENT STRATEGY 2017 - 2020

‘We will develop similar plans to facilitate business and location identification – becoming a data-driven government and providing better digital services whether nationally or across Europe is hugely dependent on holding reliable data on businesses and locations as well as people.’ (p10)

‘We will therefore continue to encourage uptake of the Eircode and develop a model for Location and Business e-Identification.’ (p10)

IRLOGI IS SEEKING A MEETING WITH THE IRISH GOVERNMENT’S CHIEF INFORMATION OFFICER ...”How can we help”
EVERYTHING OCCURS SOMEWHERE ... and at some point in time
EVERYTHING CAN BE EXPRESSED IN DIGITAL FORM ... more or less well

SO

THE LOCATION OF ALL OBJECTS .. THOUGHTS .. EVENTS/PROCESSES CAN
BE EXPRESSED IN DIGITAL FORM

BUT .......

LOCATION IS RELEVANT IN SOME (MOST) CIRCUMSTANCES ... BUT NOT
ALL
LOCATION & eGOVERNMENT (2)

Location Relevance

• WHEN LOCATION NOT REALLY RELEVANT
  o MACRO (COSMIC) SCALE & MICRO (eg MOLECULAR / ATOMIC) SCALE

• OUR FOCUS ... ‘the location envelope’
  o FOR ANYTHING RELEVANT ON THE SURFACE OF THE EARTH ... static & moving
  o FOR ANYTHING RELEVANT BELOW THE EARTH SURFACE ... pipes, geology, soils, etc
  o FOR ANYTHING RELEVANT ABOVE THE EARTH SURFACE AND WITHIN NEAR SPACE ... climate, satellites, planes, drones, etc
SOME KEY GENERAL eGOVERNMENT CHALLENGES

• SECURITY
• PROTECTING PRIVACY
• DIGITISING ‘EVERYTHING’
• MOVING INCREASINGLY TO REAL TIME
• ARTIFICIAL INTELLIGENCE INPUTS/IMPACTS
• INTEROPERABILITY

• BACK-END TRANSFORMATION ... with location as a key feature
• FRONT-END ... with location as a key feature
GETTING DEPARTMENT BACK-END RIGHT (1)
EXAMPLE - A FORMER IRISH COUNTY CEO’S VISION

• DAY 2 AFTER TAKING CEO RESPONSIBILITY
  o “I will take no decisions on the basis of paper”
  o “I don’t want to have an office”

• BROAD STRATEGY
  o STAGE 1 --- “Digitise all our legacy data”
  o STAGE 2 --- “I want to know what is going on amongst all my staff NOW, in my city NOW” “I want answers NOW”
  o STAGE 3 --- “What I really want to know is what is coming down the track”

• DIGITISING THE DATA
  o TIME STAMPING
  o CITIZEN/BUSINESS
  o LOCATION STAMPING
GETTING THE BACK-END RIGHT (2)

Example – Object Based linked Database: OSi

• MILLIONS OF OBJECTS IN VECTOR OR POINT FORM .... House, section of pavement, group of trees, bridge, road centre island, manhole cover, lake, transformer station, hedgerow, light pole, electricity transformer box, etc, etc, etc

• EACH OBJECT HAS A UNIQUE ID

• OBJECTS ACCESSIBLE OVER THE INTERNET

• CAPACITY FOR USERS TO ADD ATTRIBUTE DATA ... SUBJECT TO TIGHT CONFORMANCE RULES

• DATA IN LINKED DATA FORM ... WHICH MAKES FOR EASY MACHINE READING

• SOLID DIGITAL DATABASE PLATFORM TO LINK TO ALL SORTS OF GOVERNMENT DATA

• GREAT IoT POTENTIAL
GETTING THE BACK-END RIGHT (3)

SECURITY ... PRIVACY
SECURITY ... PRIVACY
SECURITY ... PRIVACY

TRUST

ADVERTISEMENT
IRLOGI HOLDING A WEBINAR AT 14:00 CET ON 30 APRIL 2018
‘SECURITY AND PRIVACY- SHOULD GI PROFESSIONALS WORRY ABOUT THEM?’
Register on IRLOGI web site
GETTING THE FRONT-END RIGHT

• SEARCH
  o GOOD PLACE NAME BASED SEARCH
  o SPATIAL OBJECT BASED SEARCH
  o USER DRIVEN MAP BASED SEARCH AND VISUALISATION

• GOOD LOCATION RELATED SEMANTICS

• USE EMERGING TECHNOLOGY
  o BOTS ... voice activated interaction
  o AI / MACHINE LEARNING TO CUSTOMISE CITIZEN/BUSINESS PROFILES
  o BLOCKCHAIN
CHALLENGE FOR EUROGI

• ACCEPT eGOVERNMENT AS AN AREA OF IMPORTANCE WHERE EUROGI & ITS MEMBERS CAN MAKE A MEANINGFUL CONTRIBUTION .... at the EU and national levels

• ESTABLISH A WORKING GROUP ON eGOVERNMENT
  o GET UP TO SPEED REGARDING eGOVERNMENT MATTERS
  o IDENTIFY EUROPEAN (and other) BEST PRACTICES
  o CLARIFY LOCATION/SPATIAL POTENTIALS/OPPORTUNITIES
  o ENGAGE WITH EU COMMISSION .... “How can we help” ... “Its much more than INSPIRE”
  o ENCOURAGE MEMBERS TO ENGAGE WITH THEIR NATIONAL RESPONSIBLE AUTHORITIES .... “How can we help”
  o SET OUT IDEAS FOR EU eGOVERNMENT STRATEGY 2021 – 2025
  o RUN WEBINARS ON RELEVANT eGOVERNMENT LOCATION/SPATIAL RELATED ASPECTS