



GRAD

Driving Innovation for
Safer Maritime Navigation

UK & Ireland Perspective on the MCP



General Lighthouse Authorities of the UK and Ireland (GLA)
Gareth Wimpenny

Research and Development Directorate (GRAD)

Research into lights, **communications**, radio AtoN, GNSS, eLoran.....

Lighthouse authority for the UK and Ireland



Our mandate is *Aids to Navigation*

We work with, and provide data to:

- UK Hydrographic Office (UKHO)
- MCA & Irish Coastguard
- Vessel Traffic Services (VTS), Ports & Harbours

Data exchange between multiple people and departments!



and GRAD provide input to

- Ofcom (UK radio communications regulator)
- IALA
- CIRM
- IEC and CEPT
- International Maritime Organisation (IMO)
- International Telecommunication Union (ITU)

Standardisation and regulation

GLA perspectives are based on our mandate

Our perspectives will feed into other departments

- S-125 'Marine Aids to Navigation (AtoN)'
-  S-201 'Aids to Navigation Information' ← GRAD R&D Project with UKHO
Use S-201 for sharing detailed AtoN data, including between departments
Secure using SECOM
-  Securing AIS... especially to prevent spoofing radio AtoN
- The MIR provides a Public Key Infrastructure (PKI)
This can be used for SECOM and for securing AIS