



# Nuclear emergency planning offsite plans – any real change?



**Sean Morris**  
**NFLA Secretary**  
**NFLA Scotland Forum meeting, January 2020**



# Agenda

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- **Fukushima and the need for change**
- **EU Basic Safety Standard and Changes to REPPiR**
- **Issues – size of inner and outer zones**
- **Pro-active or reactive plans and public behaviour**
- **Pre-distribution of iodine tablets**
- **Enhanced role of Councils and changed role of ONR**
- **Testing and exercising and public information**
- **Conclusions**







# Key EP lessons from Fukushima

- Evacuation predicated on 10 km zones (45 – 60 km evacuation in places)
- Huge traffic congestion on all roads after incident
- Local residents received little public information
- Some could not evacuate due to lack of petrol
- Many evacuated multiple times – tired and ill
- Rest centre conditions very difficult for vulnerable
- Radiation dose predictions not used for 10 days
- Those sheltering struggled to stop airflow into house
- Some sheltering ran out of supplies
- Thousands of people self-evacuated





# EU Basic Safety Standards & REPPiR

Revision and consolidation of  
Euratom Basic Safety Standards



European Commission  
DG Energy  
D4: Radiation Protection  
Augustin Janssens



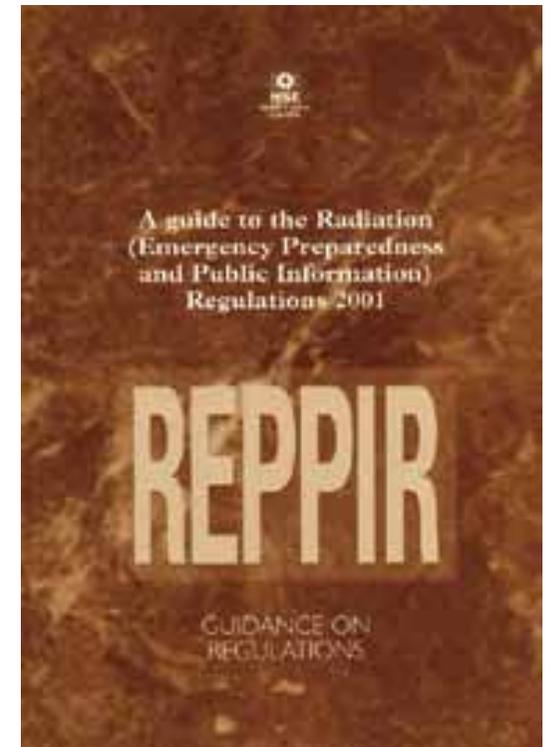
Augustin.Janssens EC DG ENER D4

- EU ordered all states to revisit EP plans
- Understand learning points from Fukushima
- Consider wider area evacuations
- Improve national nuclear EP
- Look at sheltering and public information
- Consider potassium iodide
- For UK – major update of REPPiR required



# REPPIR 2019

- **Radiation (Emergency Planning and Public Information) Regulations**
- **LA now takes lead role for offsite planning**
- **EDF puts forward size of inner DEPZ**
- **PHE provides advice to LA / ONR reviews plan**
- **OPZ set at 30kms (Fukushima scenario)**
- **Potassium iodide for DEPZ**
- **Guidance for public from LA**
- **Testing and exercising programme**





## Size of inner and outer zones

- Most sites keeping inner DEPZ as it was pre REPPiR 2019
- A few having reductions to it – Hunterston, Sizewell
- Hunterston – EDF 1km, now 2km was 2.4km
- Yet reactor has been closed for 18 months amidst much safety concern from ONR
- OPZ largely set at 30kms – should bring in adjoining councils





## Pro-active or reactive EP?

- DEPZ generally involve very few people
- Receive reasonable information and on warning system
- What if just outside?
- Duty is reactive for OPZ – appears only information will be on Council websites
- Little promotion of plans to take place





## Pre-distribution of iodine tablets

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- Iodine tablets for young and vulnerable could be important in a radiation incident
- REPPIR plans – only for those in DEPZ
- Outside DEPZ – general practice to have in ‘regional stores’
- But in an incident self-evacuation and traffic congestion likely!
- France, Belgium, Germany, US, Canada all do wide pre-distribution, but NOT UK!



## Enhanced role of LA & ONR's role

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- LA given lead role to develop plans
- But LA EPU's have been cut in half since 2010
- Seems to be a culture of encouraging reactive than proactive EP
- There should be more public information than just sections on websites!
- ONR role now to validate plans – but will they make any changes?
- ACOP – issues over dose risks



Office for  
Nuclear Regulation



# Testing, exercising and warnings

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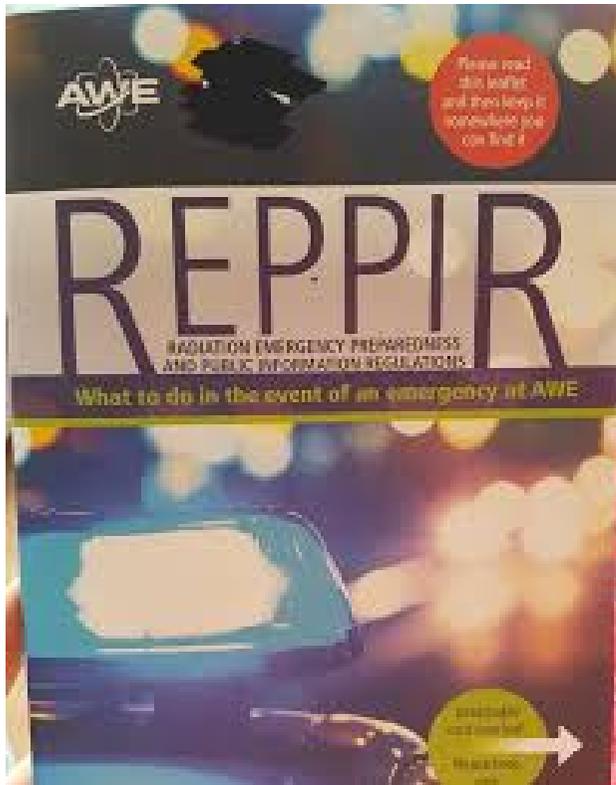


- Each plan must be exercised regularly
- Largely ‘tabletop’ exercises
- Need for ‘live’ exercises and independent observers
- Emergency warning system – phone messages in DEPZ
- City centre evacuation warning systems – much more extensive and dynamic



## Public information on REPPIR

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- **Pre-REPPIR 2019 leaflets / calendars largely done by operator**
- **Often inoffensive and full of reassurance**
- **Only go to DEPZ households**
- **LA take on this role and hopefully these will improve**
- **OPZ and wider – downplaying risks despite it being a core part of REPPIR change**
- **Rimnet, emergency communication, national planning – is it fit for purpose?**



## Conclusion – reassurance or alarm?

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- **REPPIR 2019 has some welcome changes**
- **But has little really changed?**
- **Far too more reactive emergency planning**
- **Don't want to alarm but more information can be reassuring**
- **Similar issues with CBRN planning**
- **In a Fukushima scenario – are these plans fit for purpose?**
- **Much more public consultation required**

