



Strategic Command
Defence Support

Defence Operational Energy Strategy

Priority Action 2: Energy Insights Function

Update to Industry, 13 Feb 25

Suzannah Curtis

SO1A Development, Operational Energy Authority

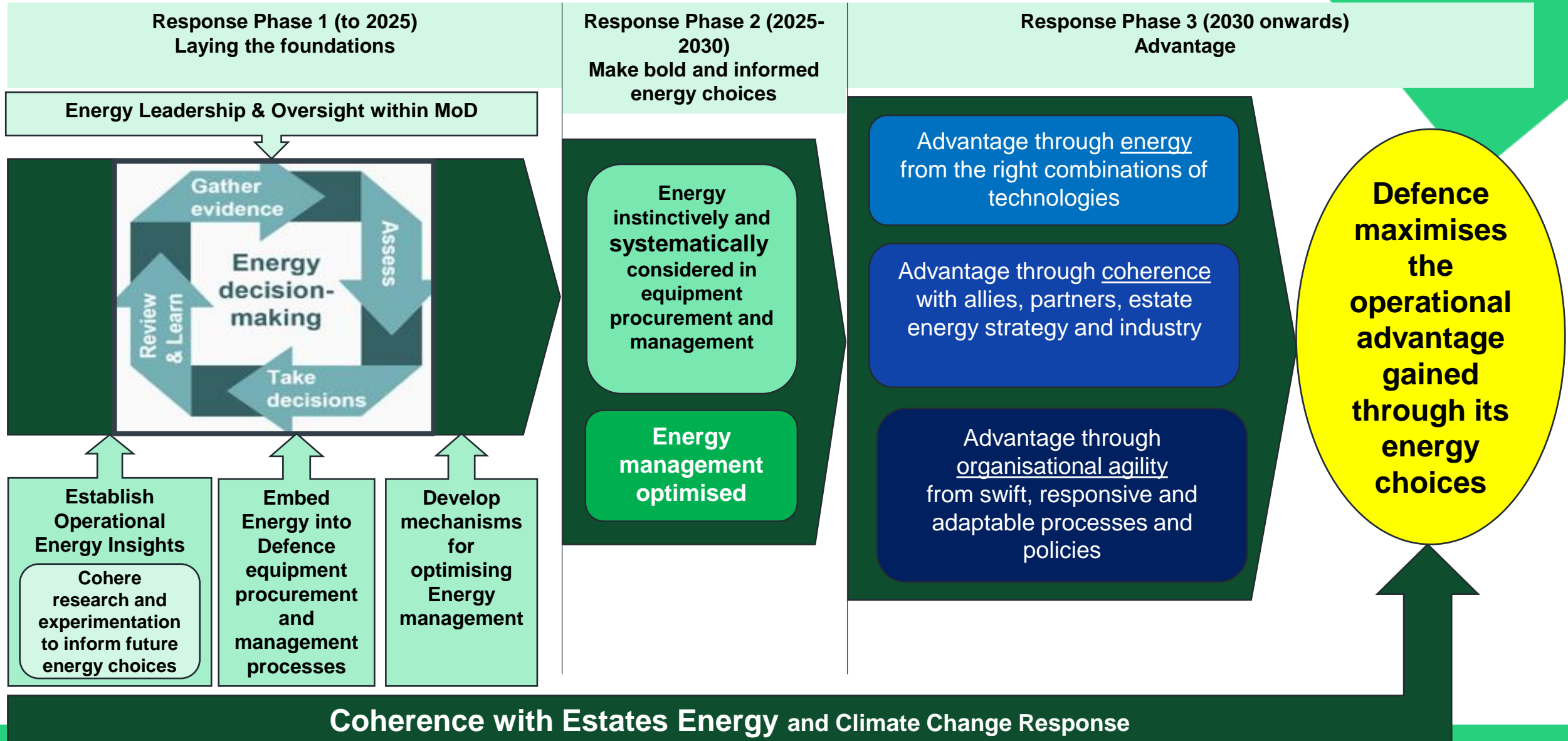
Today's Aim & Objectives

Aim: To inform and update Industry partners/potential partners on work to develop a Defence Energy Insights Function following a “small group” Industry engagement session (Oct 24) and the Defence Energy Conference 27-28 Jan 25.

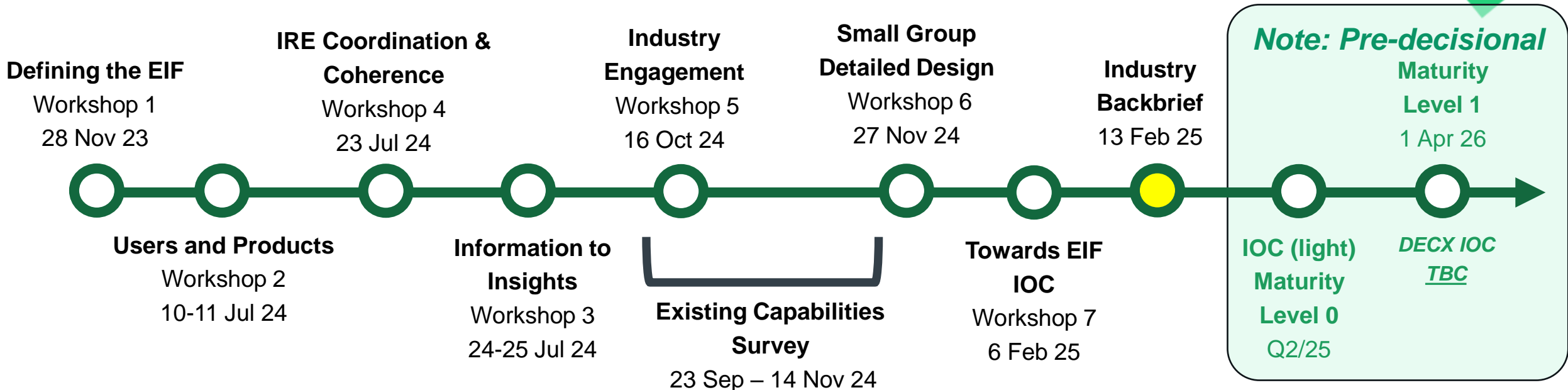
Objectives:

- To update on progress with Energy Insights Function development and its likely context in light of the SDR and Defence Reform;
- To review and seek Industry's feedback on the ongoing work to date;
- To identify where Industrial partners/potential partners may have or be able to develop relevant required capabilities; and
- To obtain Industry feedback/advice on likely associated costs (to inform ongoing development, depending on funding bid success).

The Defence Operational Energy Strategy



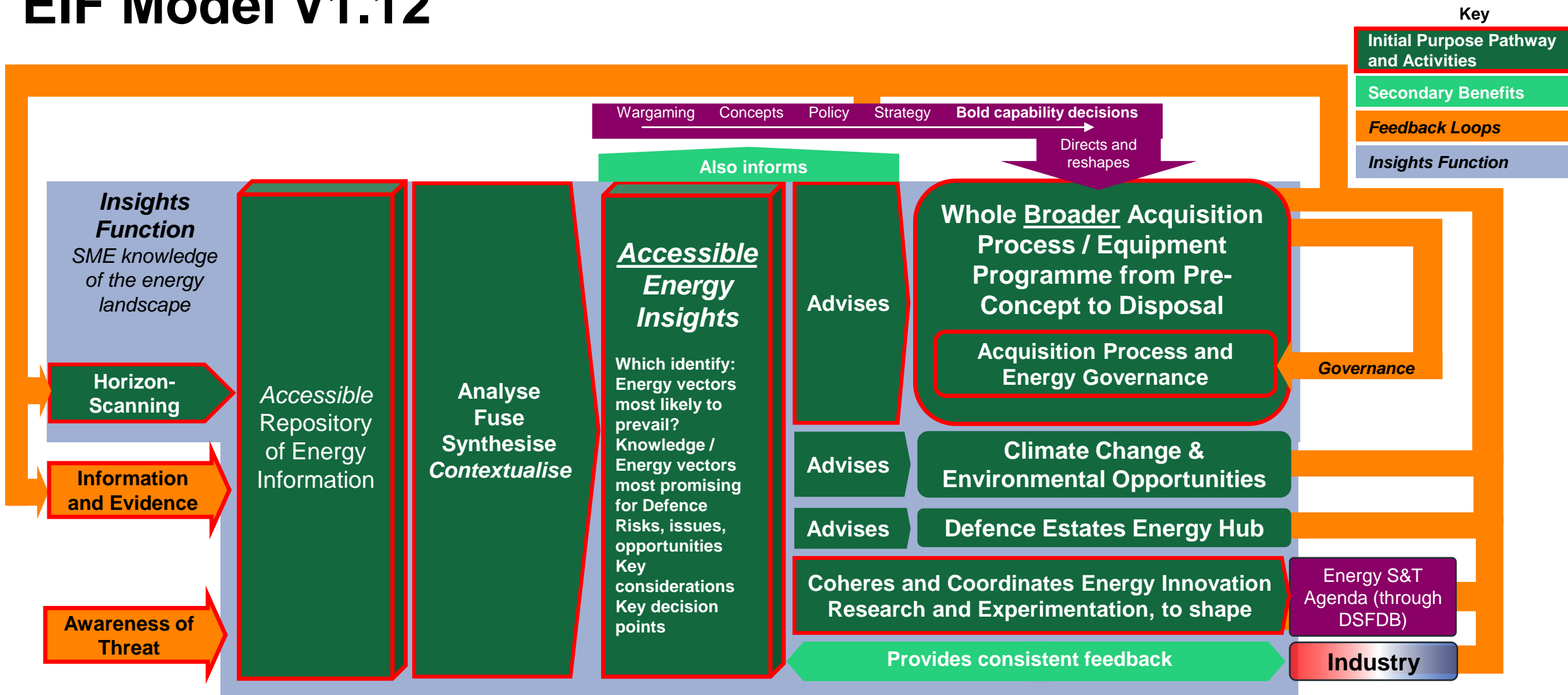
Background and Context – EIF Design Journey



Defence Climate and Energy Security Centre of Excellence (DECX) Design Work



EIF Model V1.12



DIKW model, representing the relationships between data, information, knowledge and wisdom, as reflected in the Energy Insights Function

Data		Information		Knowledge		Wisdom
Collect and Integrate	Process and Manage	Analyse and Model	Generate Insights and Interpret	Visualise, Represent and Communicate		

EIF – Example Building Blocks ML1 and beyond

Emissions Data
(from Operational
Fuel Consumption)

Weather and
Environmental Data
(e.g. from The Met
Office)

Academia (UK and
International
Universities, think
tanks)

Understanding of
current and future
legislation and
regulation

Feeds from Industry
and equivalent
insight bodies (e.g.
International Energy
Agency, The Energy
Institute)

Simulation and
scenario analysis

Suitable database(s)
or equivalent – with
ability to use or link
to what already
exists

Data Security
Protocols,
Governance and
Compliance

Digital twins

Large Language
Model / AI or
equivalent(s) to
speed up fusion and
analysis

Interactive
dashboards to
enable
communication

A baseline structure
for Insights “report”

Tailored and
personalised
reporting (to SROs
and their staff)

Plain English to
write it down ...
common
terminology ...
fewer words and
more pictures ...

***The
human(s)
in the
loop***



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Suzannah.Curtis708@mod.gov.uk