



**Land Information
New Zealand**
Toitū te whenua

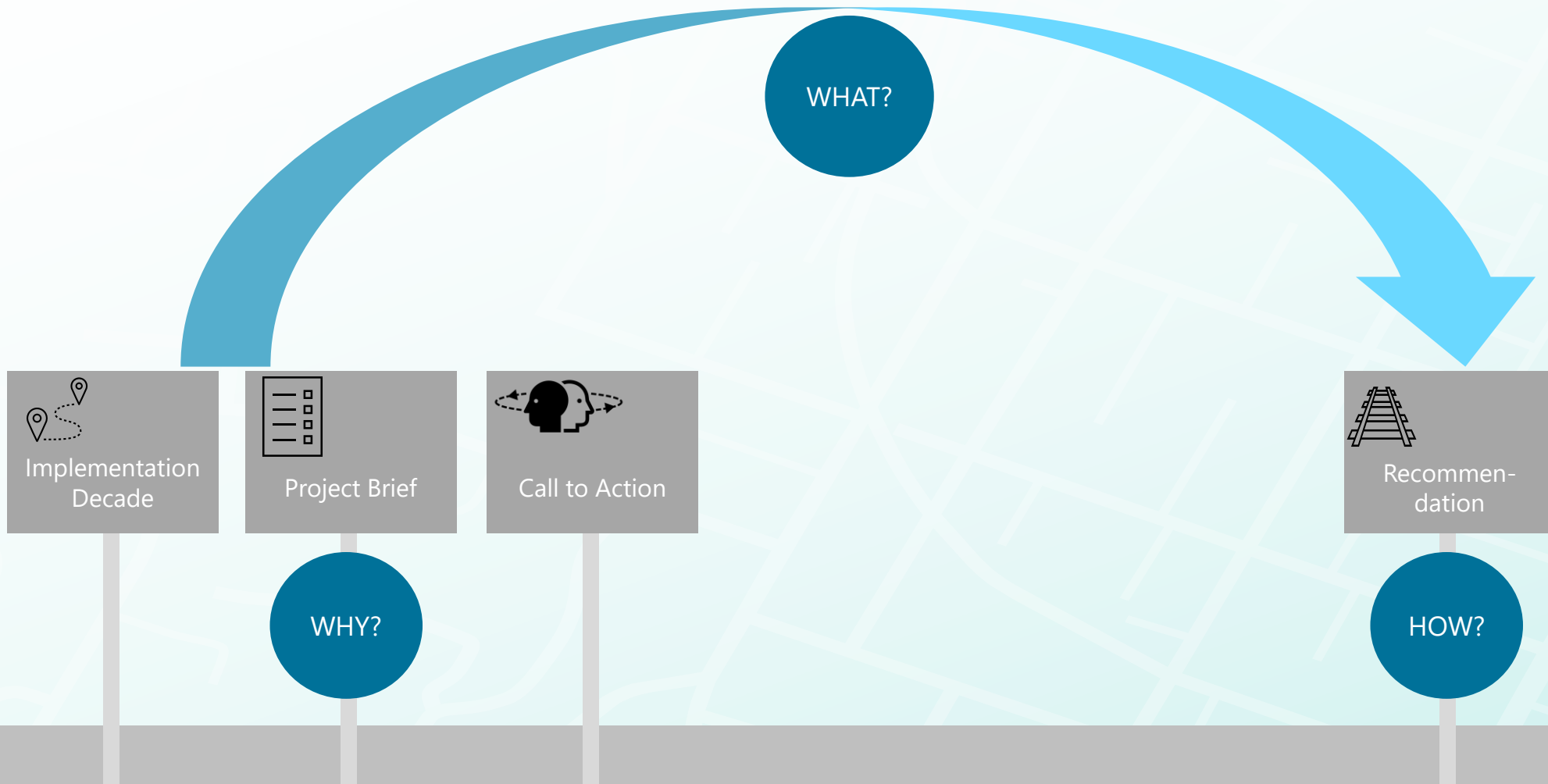
Programme Janus

Investigation phase – prototype db

New Zealand Hydrographic Authority

October 2020

Programme Janus

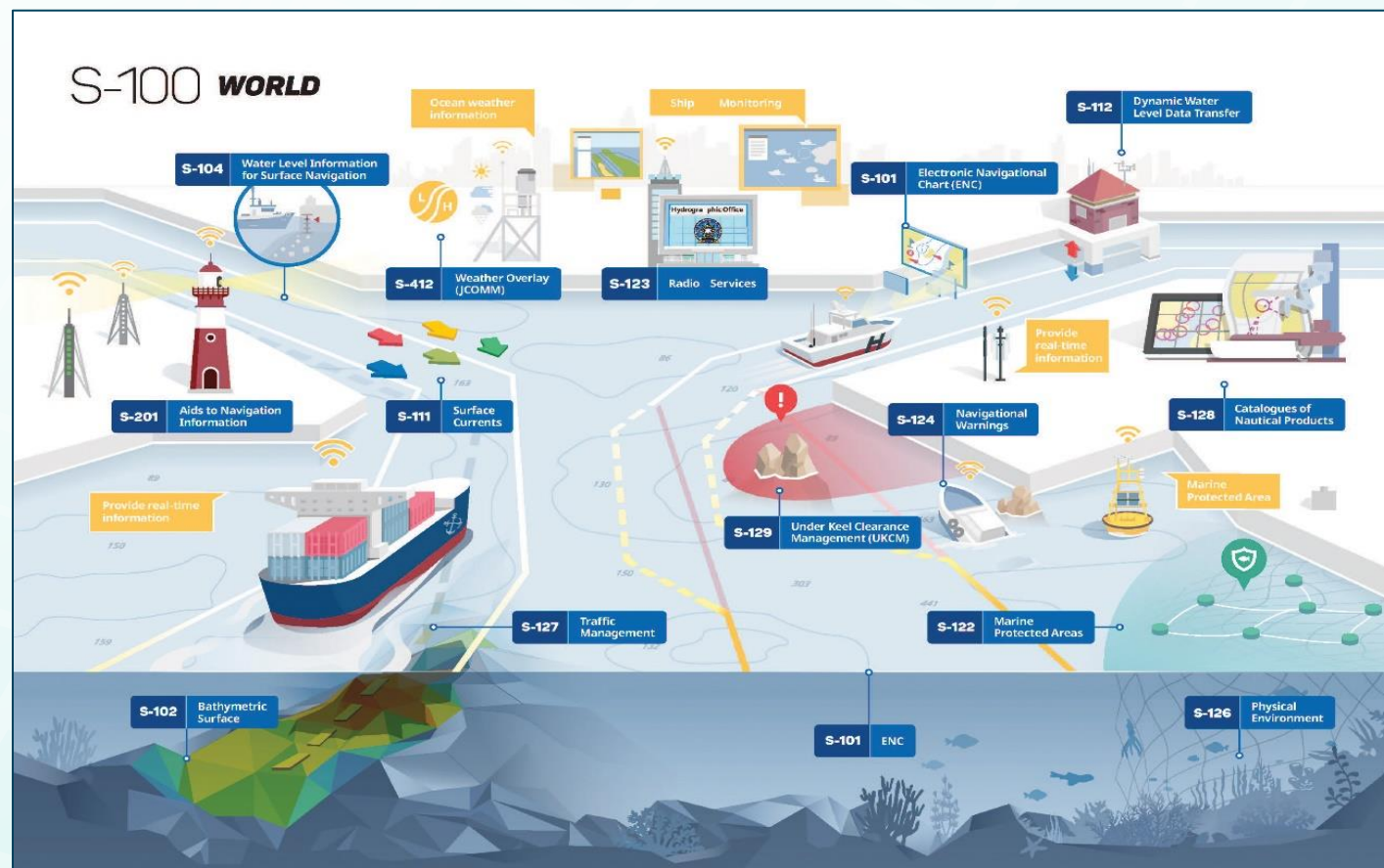




Implementation
Decade

WHY?

- Implementation and Adoption of the S-100 UNIVERSAL HYDROGRAPHIC DATA MODEL
- Supports great range of data and products for safe navigation
- Prepare New Zealand for e-navigation
- Create an opportunity for a global step-change for navigation and safety





Project Brief



Call to Action



WHY?

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Programme Janus – Project Brief
Improving the Efficiency and Readiness of the New Zealand Hydrographic Authority (NZHA) for the Future

July 2020

Version 1.0
NZHA

Page 1 of 20

Land Information
New Zealand
Toitū te whenua

Preparing New Zealand for e-navigation
Implementation and Adoption of the S-100 UNIVERSAL HYDROGRAPHIC DATA MODEL

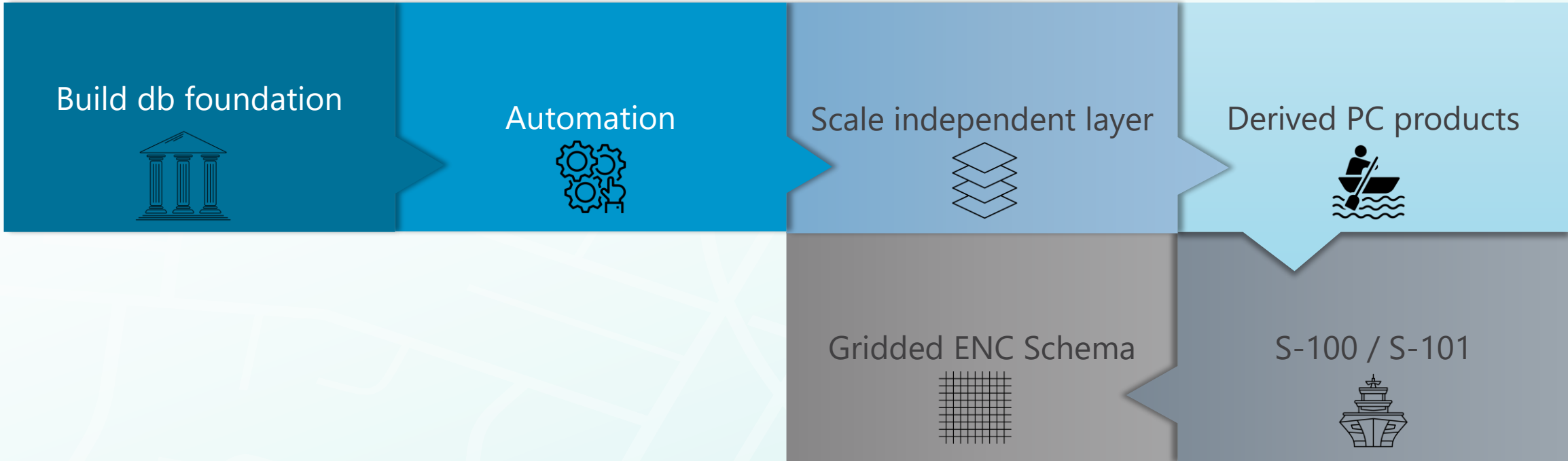
Objective ID: A4206912
New Zealand Hydrographic Authority

7 August 2020

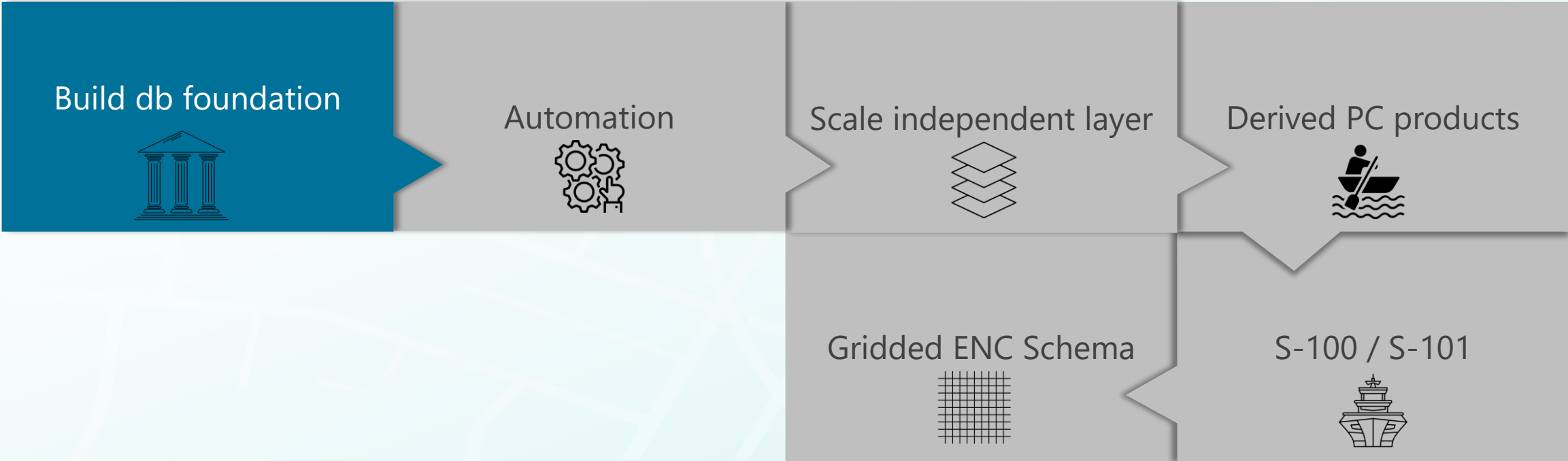
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Investigation Stage

WHAT?



WHAT?



DB Foundation

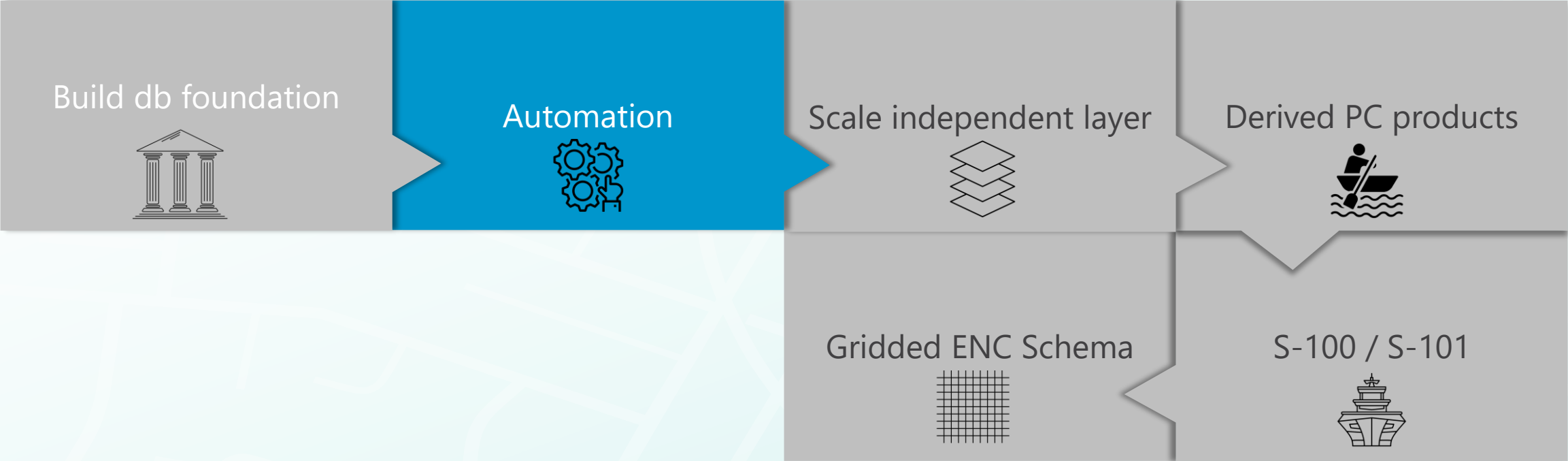


- to identify which scales need to be combined in order to facilitate the final S-100 set-up and enable the required range of products to be created
- to identify data that needs to be recompiled or generalized due to the new defined compilation scales



- Increased efficiency in chart production
- Enable product independence
- Minimize data duplication
- Enable seamless coverage
- Enable harmonization of paper and digital product production
- Enable a smooth transition from scale to scale

WHAT?



Automation

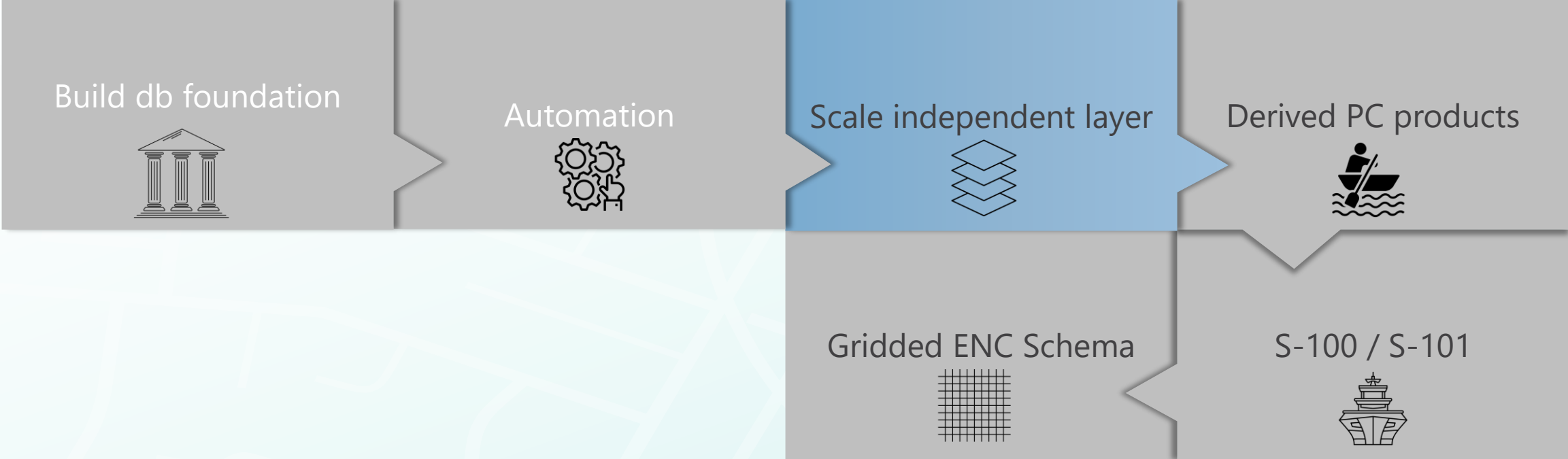


- to find automated tools in order to move and harmonize data between different scale ranges.



- Easier and faster management of source data
- Faster creation of re-schemed ENC's
- Minimize human errors

WHAT?



Scale Independent layer

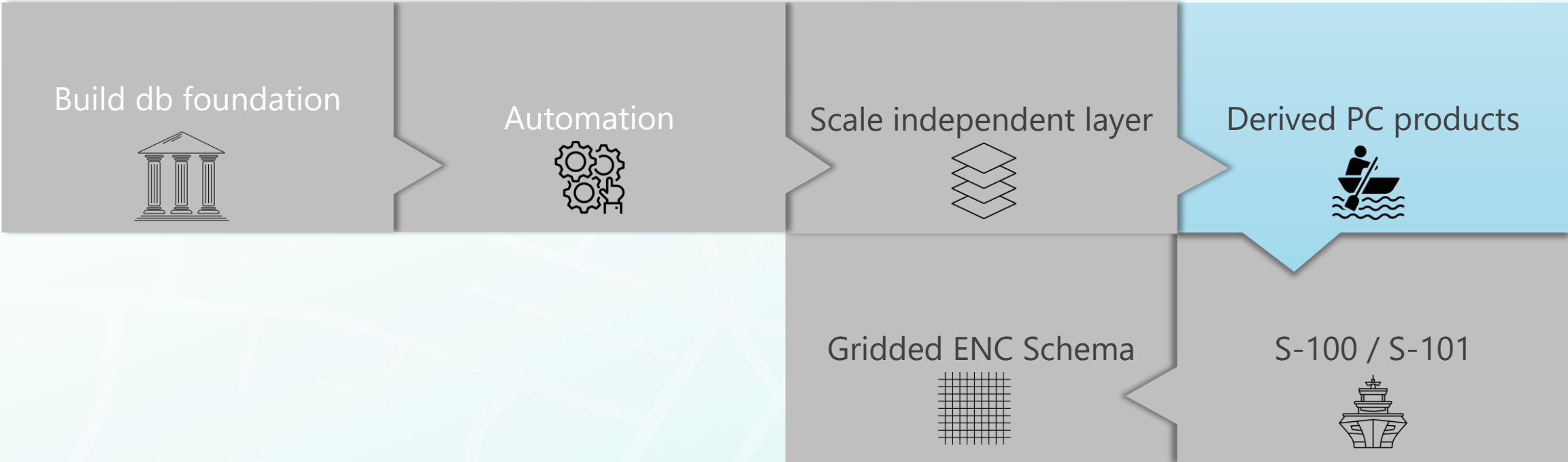


- to move as many features to scale and product independent layers



- Improve efficiency and vertical consistency, as these features only need to be managed, maintained, and edited only once.

WHAT?



Derived Paper Chart

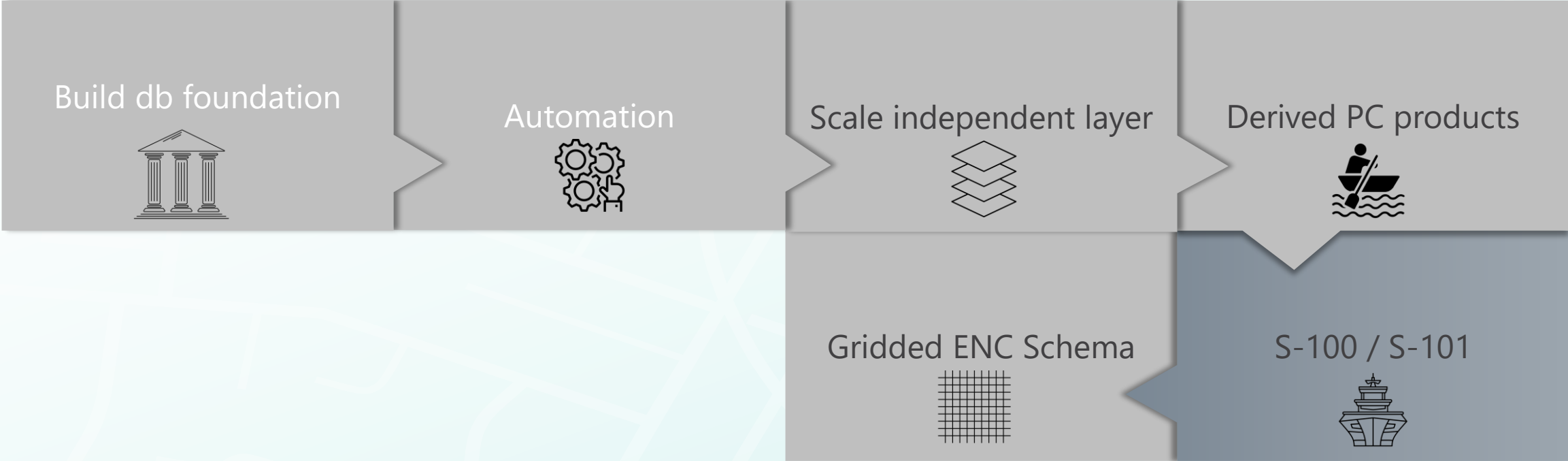


- to combine electronic and paper chart production efficiently and economically. (e.g. data handling in overlapping areas on Paper Charts)
- to fully automate paper chart production



- avoid data duplication,
- reduce maintenance overhead,
- reduce manual work,
- focus on D1DC

WHAT?



S-100 and S-101

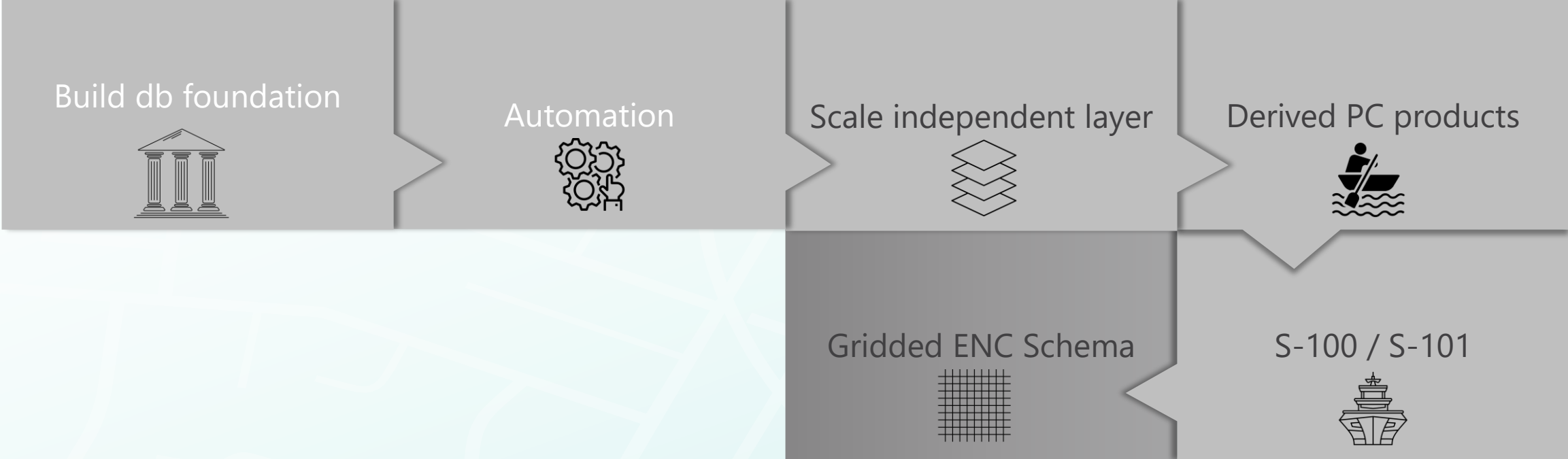


- to align with the new IHO S-100 standard and
- to identify data improvements



- efficiencies from S-100 (such as richer geometric models, information types and complex attributes)

WHAT?



Gridded ENC Schema

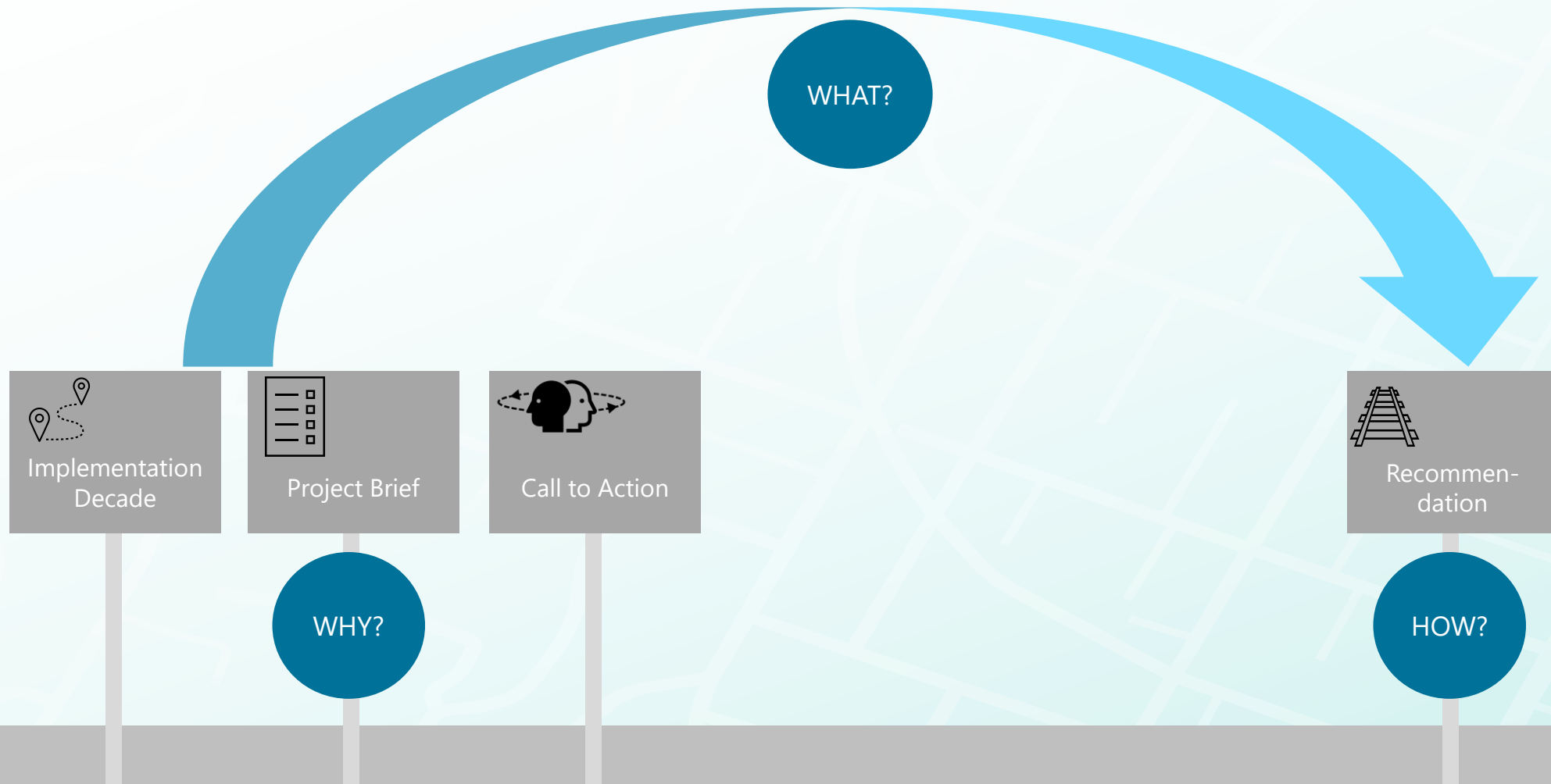


- to move away from the intricate paper charts extents that the ENC were created from and
- to eliminate product specific data within the db.



- no or minimized data overlaps
- no ENC overlaps within the same scale range
- more efficient data maintenance
- increased data conformity on different scales
- improved horizontal and vertical consistency

Programme Janus – Investigation Phase





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Programme Janus

Investigation phase

Thanks

Questions?

New Zealand Hydrographic Authority

October 2020