

APPLICATION OF REMOTE SENSING FOR MONITORING URBAN SOIL SEALING

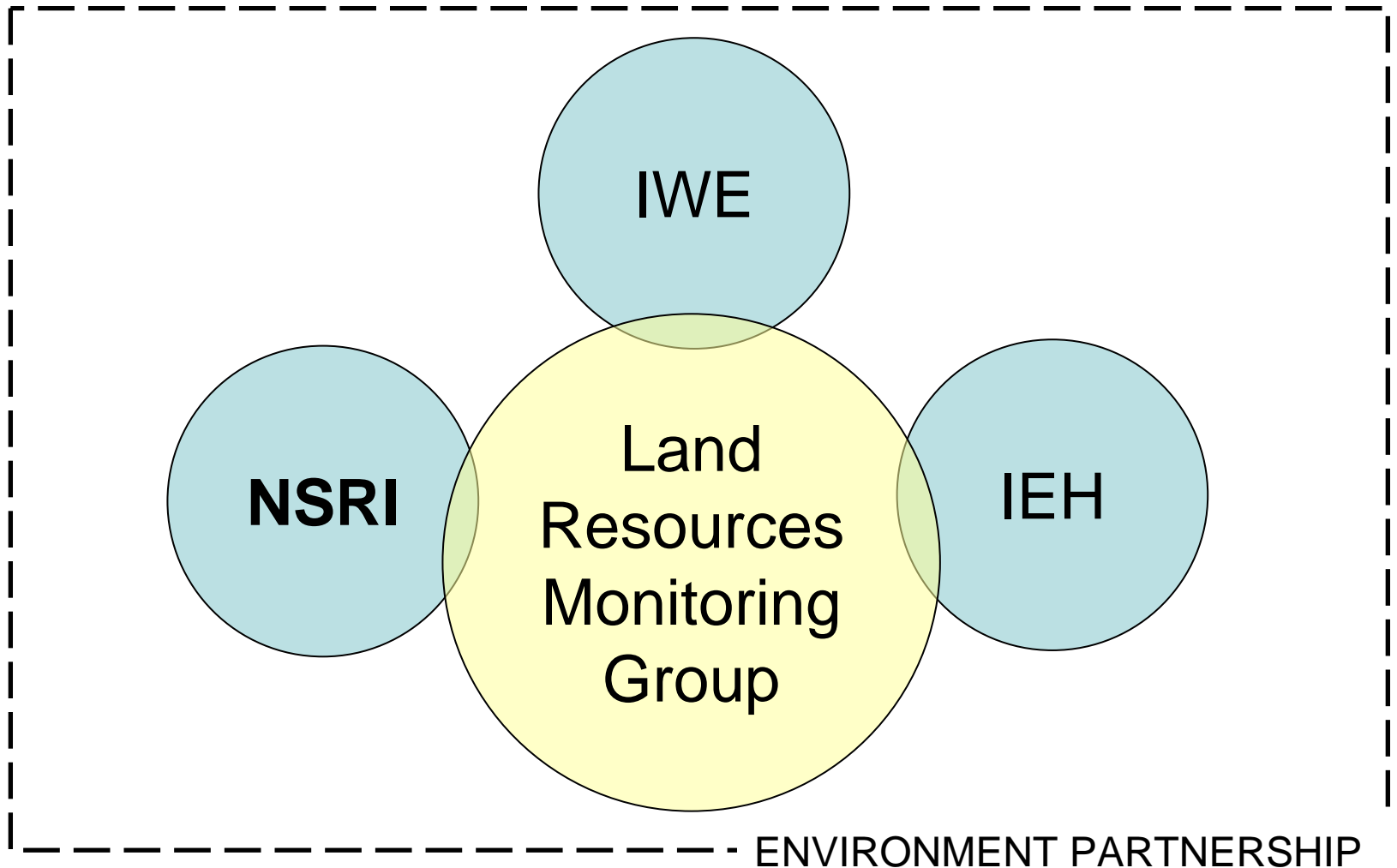
To identify and measure changes in the area of soil prevented
from carrying out functions by sealing

Gavin Wood

g.a.wood@cranfield.ac.uk

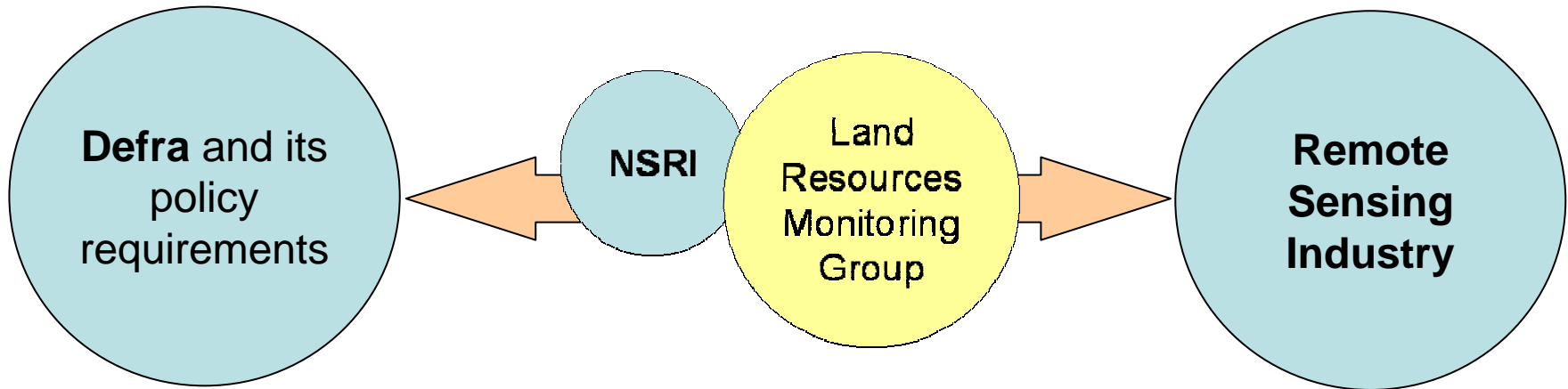


Land Resources Monitoring Group



ENVIRONMENT PARTNERSHIP

Effective partnerships



- Sources of data
- Processing methods (to deliver monitoring of sealing)
- Integration with current Defra monitoring
- Compatibility of data/information archiving
- Operational feasibility
- Multiple application across other Gov't departments

Work package 1

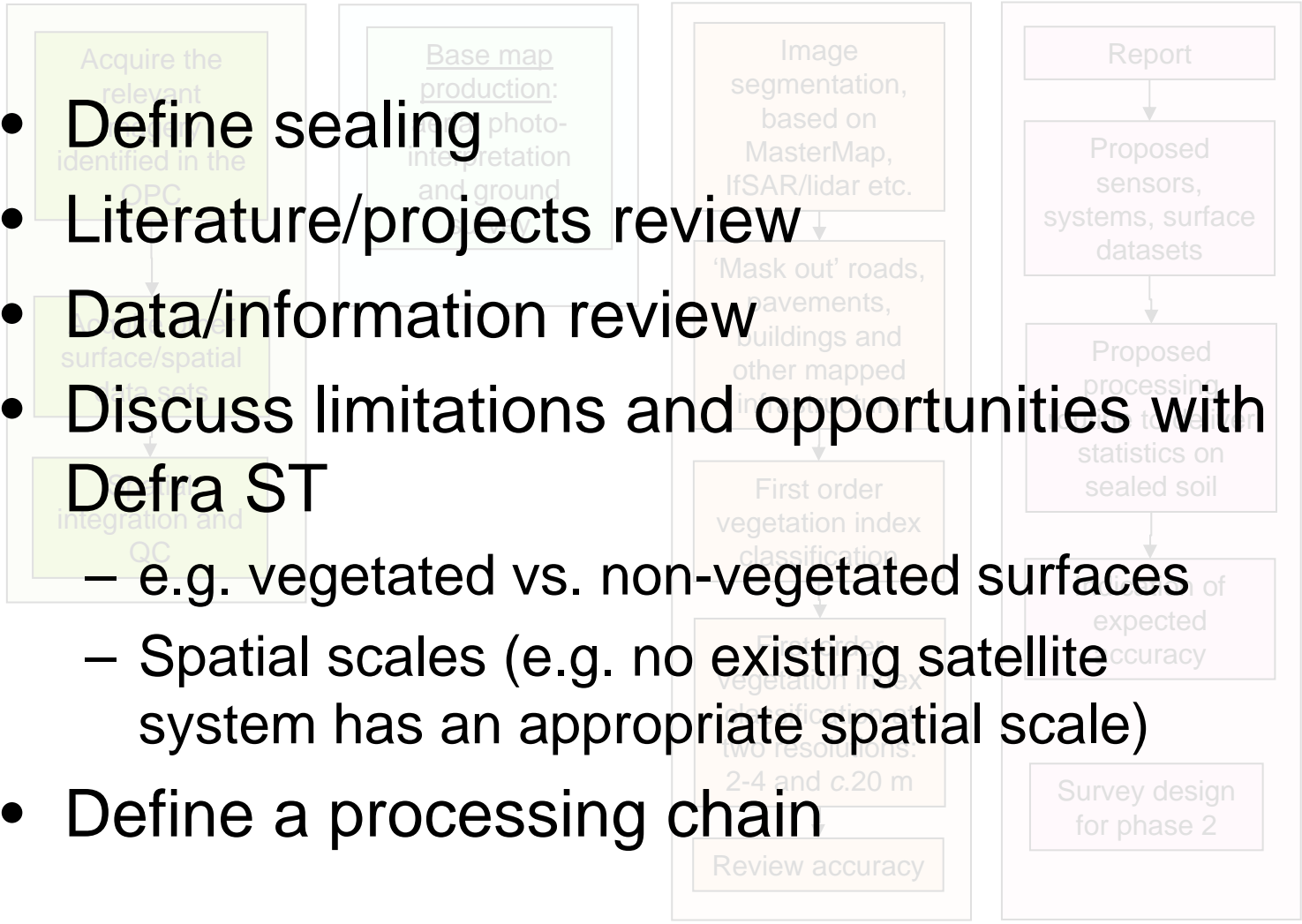
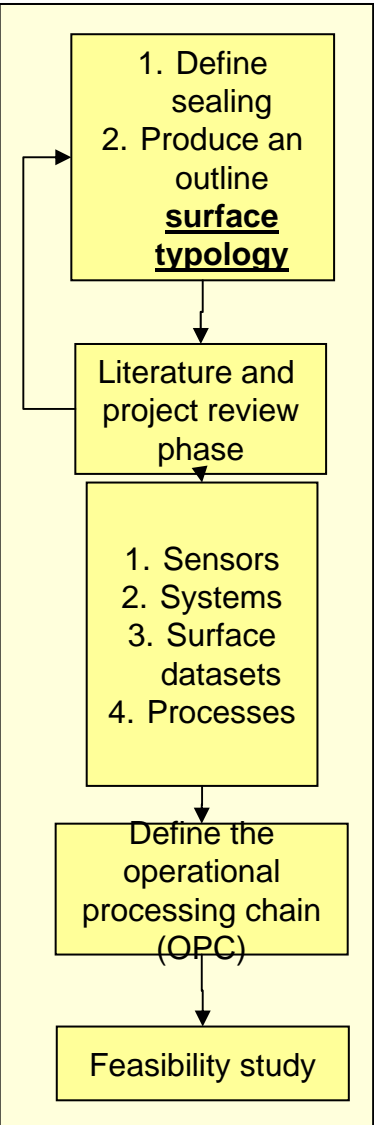
Work package 2

Work package 3

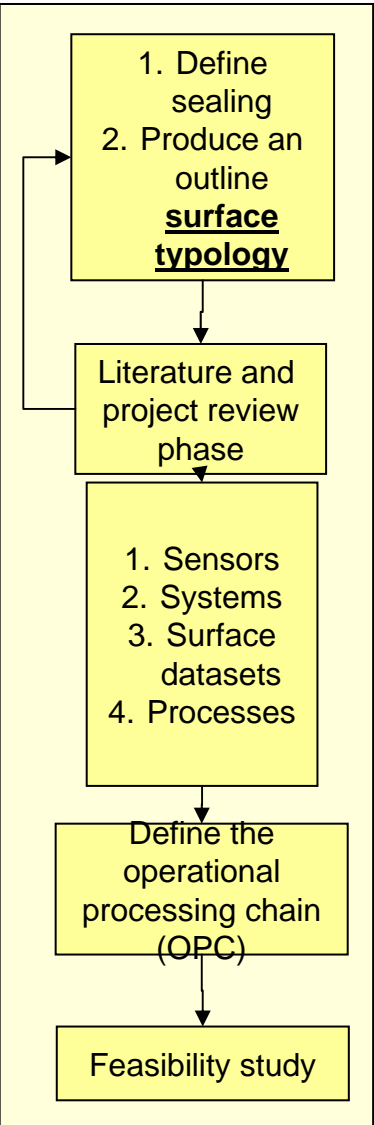
Work package 4

Work package 5

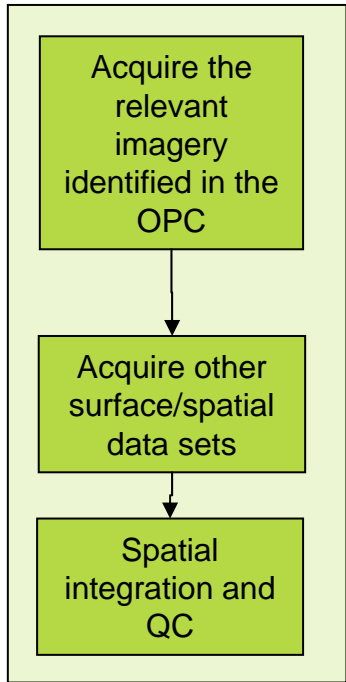
- Define sealing
- Literature/projects review
- Data/information review
- Discuss limitations and opportunities with Defra ST
 - e.g. vegetated vs. non-vegetated surfaces
 - Spatial scales (e.g. no existing satellite system has an appropriate spatial scale)
- Define a processing chain



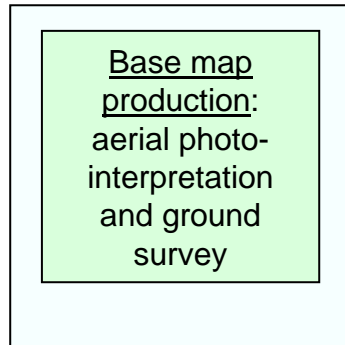
Work package 1



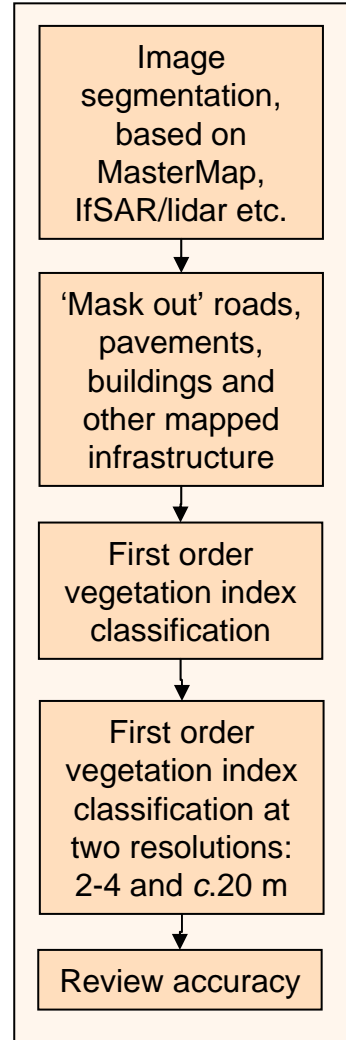
Work package 2



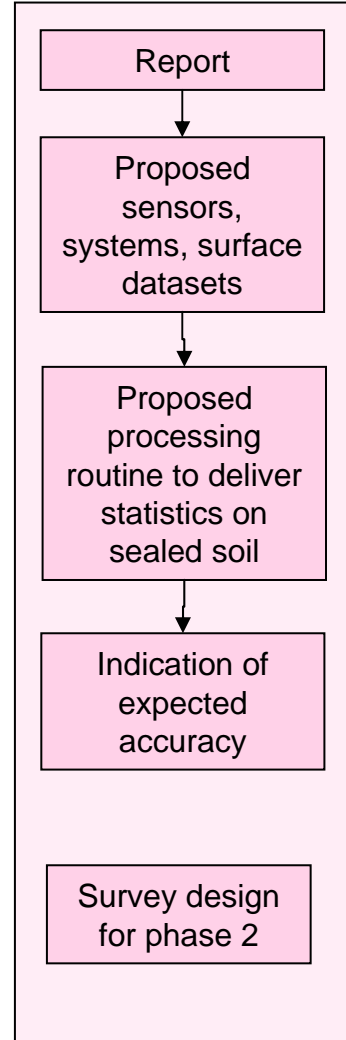
Work package 3



Work package 4

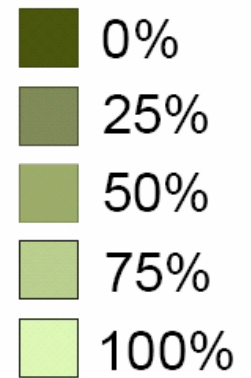


Work package 5





sealing



Mapping accuracy
of 70-90%

Ongoing work

- Review and develop outline approaches for evaluating:
 - biodiversity, drainage, aesthetics
- Data management (meta-data, archiving)
- Cost-benefit
- National operational feasibility
- Recommendations (inc. use of airborne systems)
- Maintain engagement with Defra



sealing

