

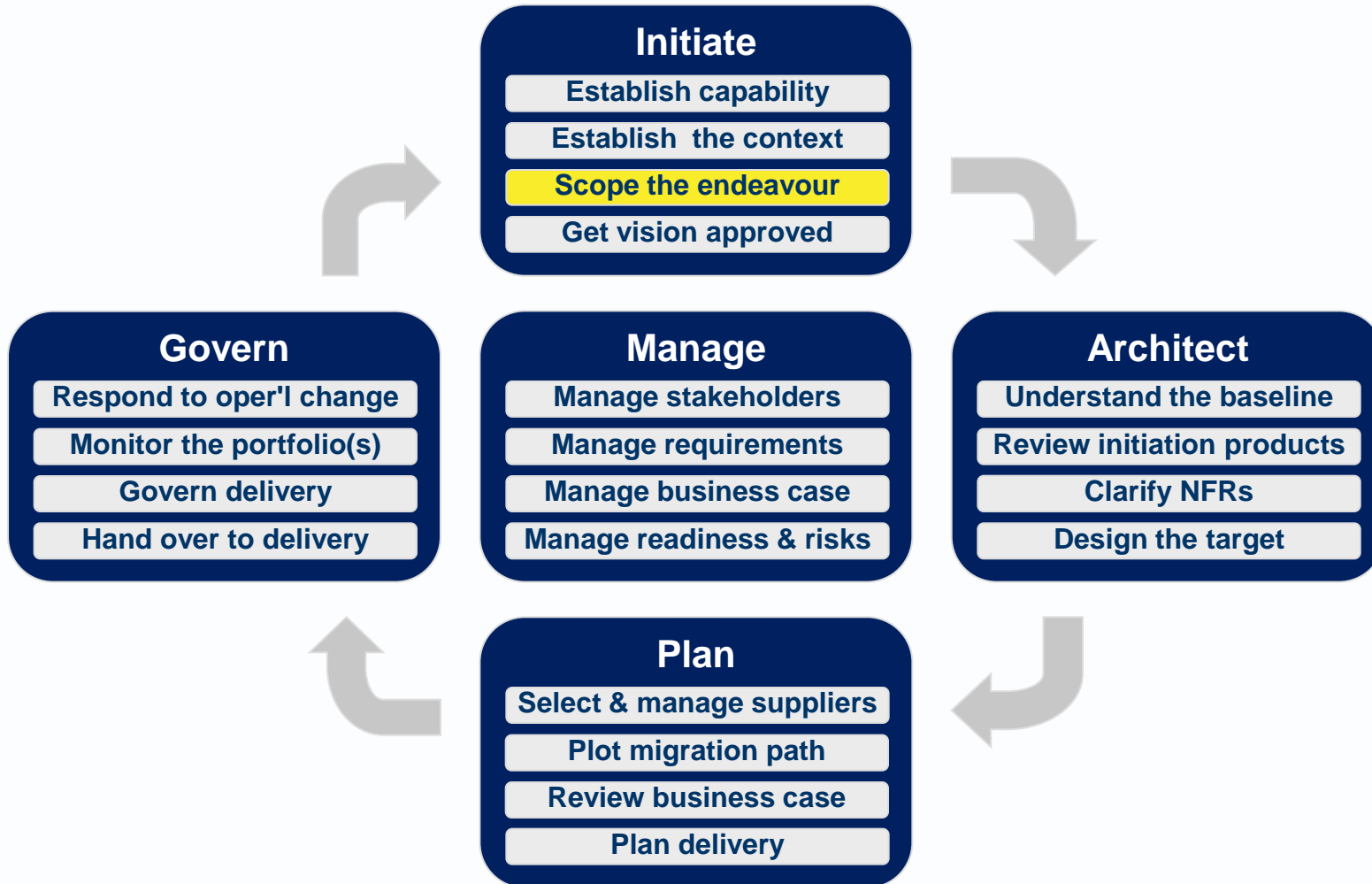
Avancier Methods (AM)

INITIATE

Scope the endeavour

It is illegal to copy, share or show this document
(or other document published at <http://avancier.co.uk>)
without the written permission of the copyright holder

Scope the Endeavour (AM level 2)

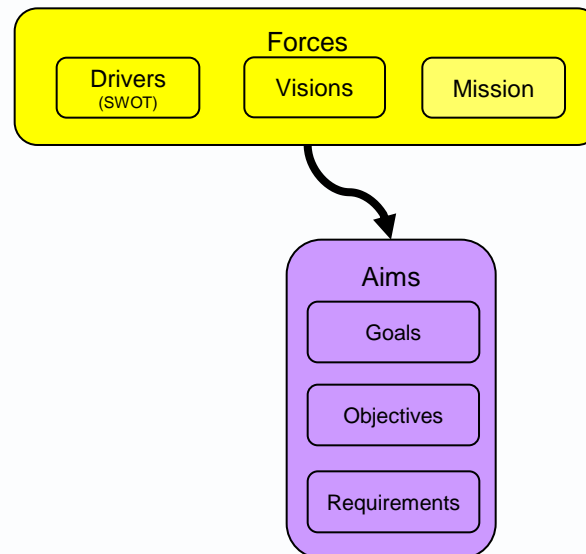


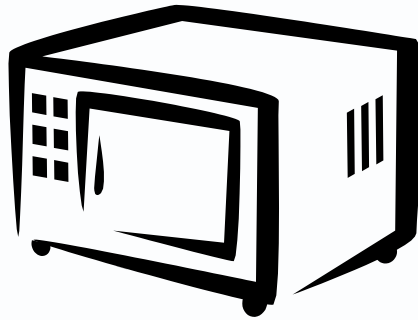
Scope the Endeavour (AM level 3)



1. Identify stakeholders (see stakeholder management)
2. Identify aims
3. Identify constraints
4. Agree a solution vision
5. Scope in several ways
6. Plan the “architecture project”

- ▶ Enterprise leaders respond to drivers by defining aims
 - e.g. define expansion goals to ward off competition.
- ▶ As they cascade downwards, broad and high level aims are hierarchically decomposed into narrower and more detailed aims.
 - A lower level aim can support more than one higher level aim – so it is not a strict hierarchy.





1 Increase microwave oven market share by end of this year

1.1 Design a microwave oven priced < 60% of the competition.

1.1.1 Undercut current cost of parts by 30%

1.1.1.1 Reduce the number of controls used

1.1.2 Undercut current cost of assembly by 30%

1.1.3...

1.2 Increase production capacity

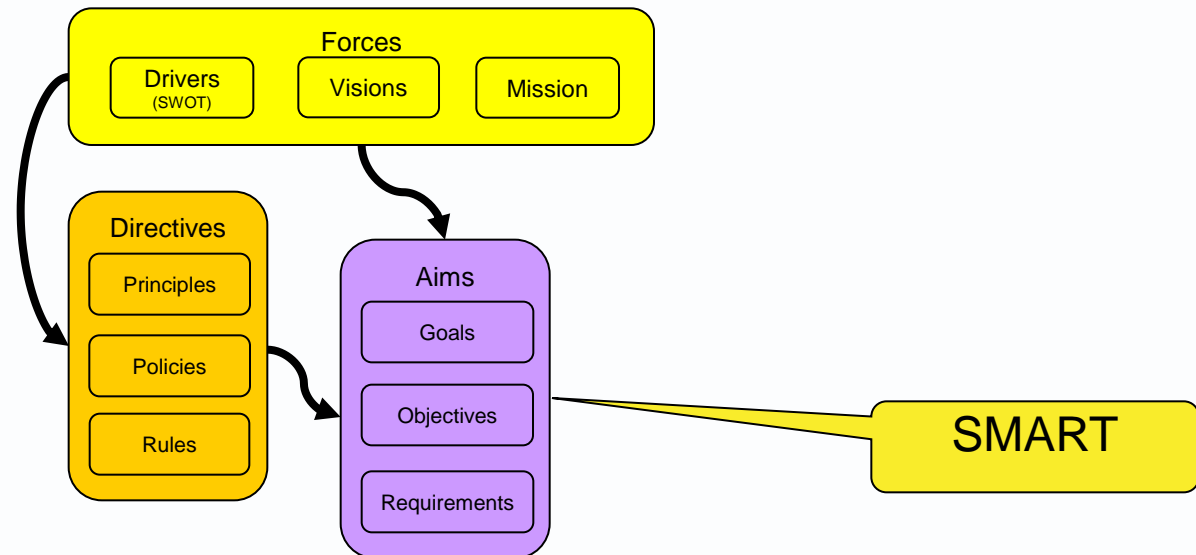
1.3...

2 Increase profit margin on market leading products by end of this quarter

3...

► Some goals may derive from principles

- Principle – data security is paramount
 - Goal – in the next year, we shall have no more than 2 top-level security incidents.
- Principle – buy rather than build.
 - Goal – in the next year – at least 75% of our new application systems will be packages rather than bespoke.

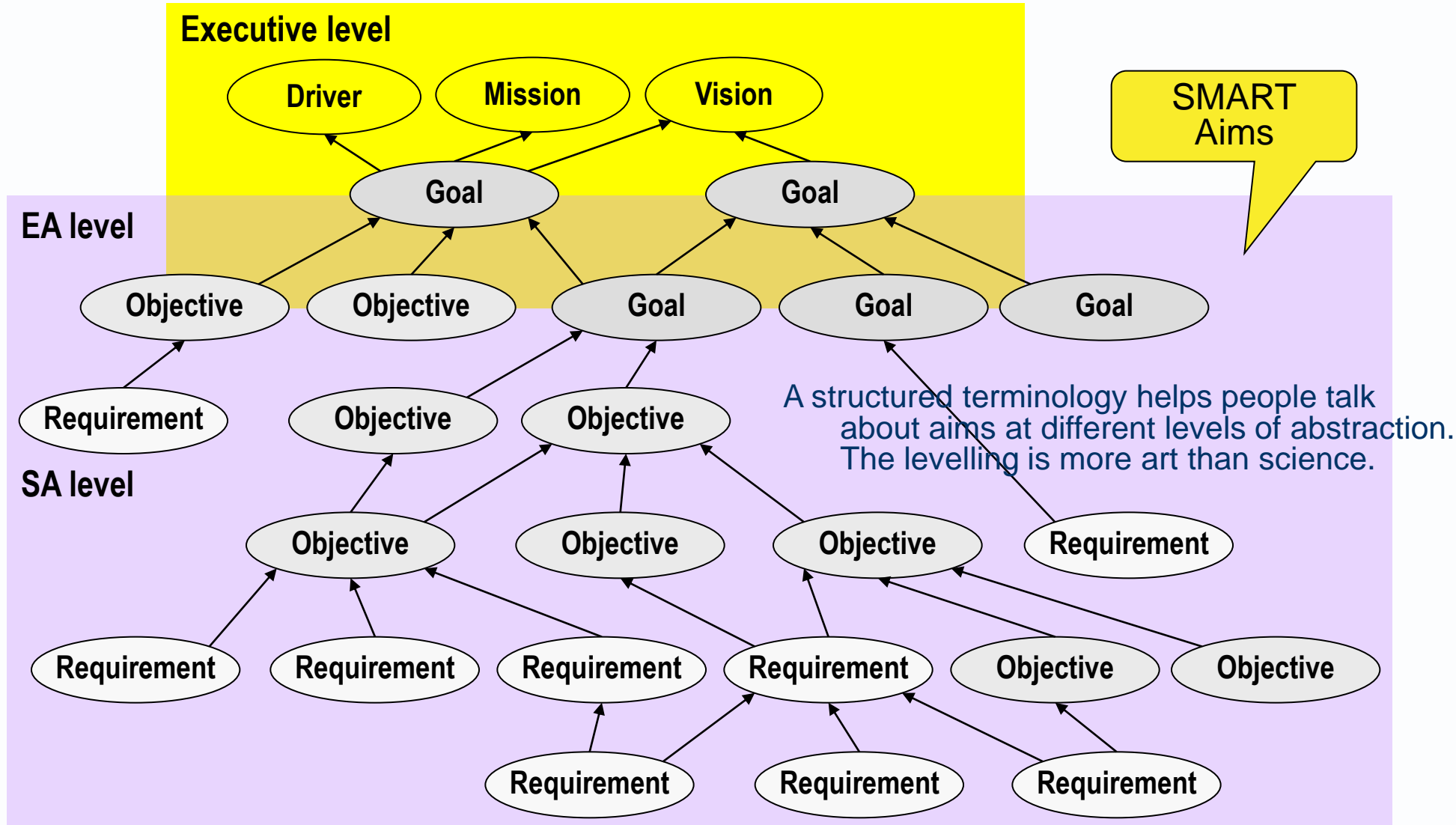


- ▶ There is a loosely structured hierarchy of aims.



- ▶ The terms can be used to differentiate levels within a given aim hierarchy.
- ▶ But there is no sharp or universally agreed distinction between aims at different levels.

Our aims hierarchy

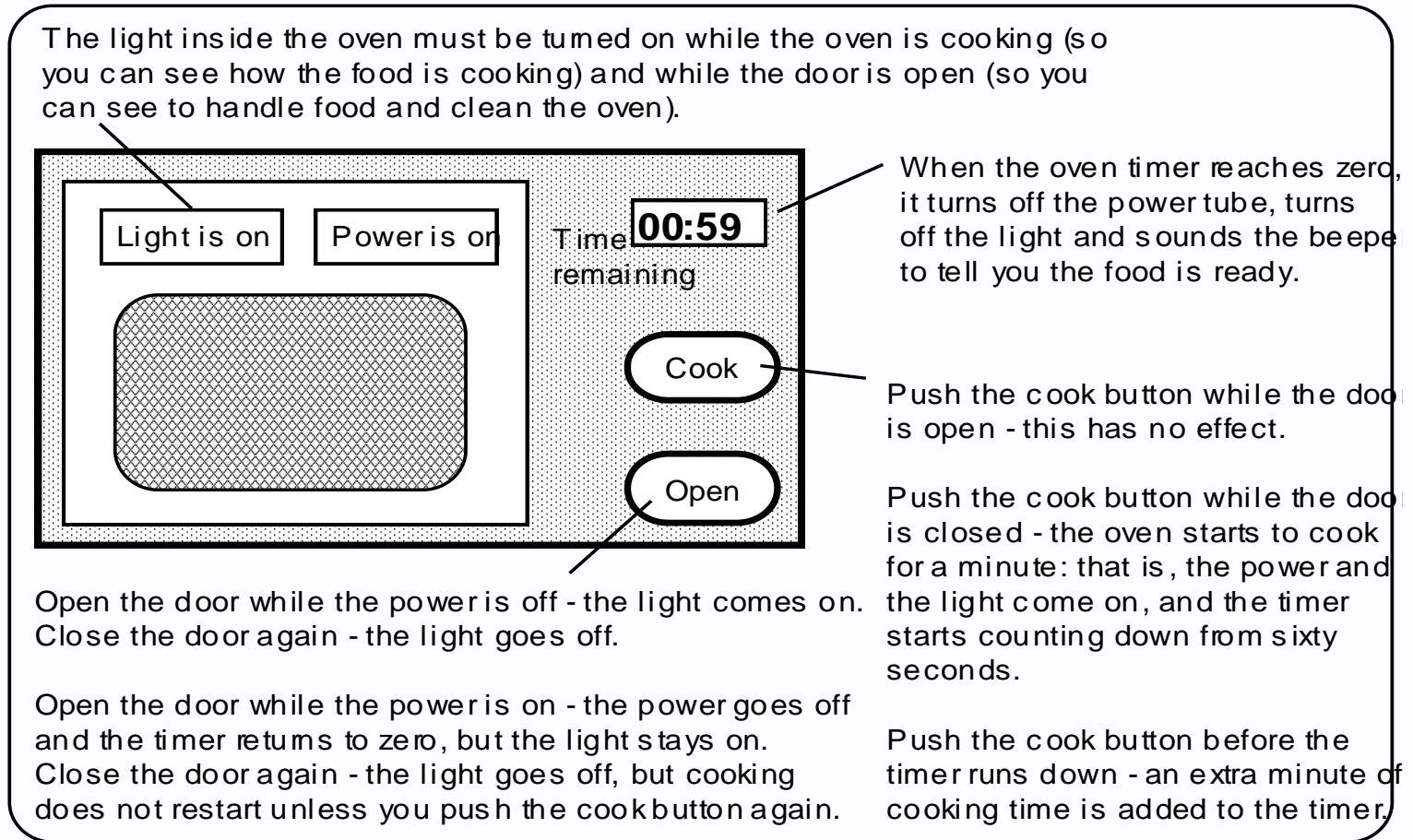


Identify constraints

- ▶ Identify the constraints on work to be done:
 - ▶ Time
 - ▶ Budgets
 - ▶ Resources
 - ▶ Standards
 - ▶ Regulations

Agree the Solution Vision, using a diagram if possible

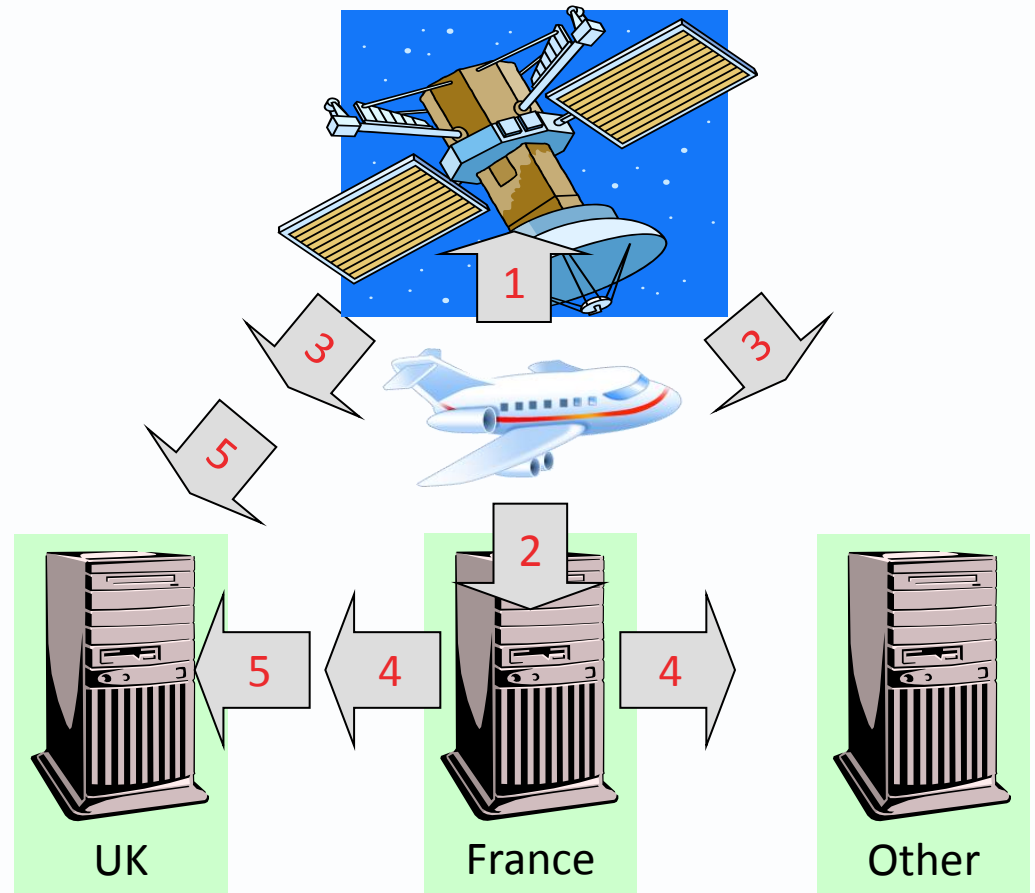
- ▶ Problem: Make a cheaper microwave oven
- ▶ Solution: The “one minute microwaver” (after Schlaer and Mellor)



Solution Concept/ Vision diagram: an illustration

Problem: how to maintain integrity of airplane position data?

1. Airplane sends time-stamped airplane/position message to satellite
2. Airplane also sends time-stamped airplane/position message to data centre (e.g. France) of controller responsible for current air space
3. Satellite forwards the airplane/position message to UK and others
4. France forwards the airplane/position message to UK and others
5. UK receives messages
6. UK replaces airplane/position record *if time stamp of message is later than time stamp of message last processed*



However

- ▶ A Solution Vision may be a relatively elaborate document.
- ▶ In effect, a first-cut Solution Outline.

Scope the Endeavour

► Define three dimensions

Breadth	Constraints	Depth
Size & complexity of System/project Large / Medium / Small	Time/resources to describe the system/project Little / Moderate / Lots	Level of detail reachable in descriptions/plans
Large	Little	Vacuous
Medium	Little	Sketchy
Large	Moderate	Sketchy
Medium	Moderate	Elaborate
Small	Little	Elaborate
Large	Lots	Elaborate
Small	Moderate	Fulsome
Medium	Lots	Fulsome
Small	Lots	Complete

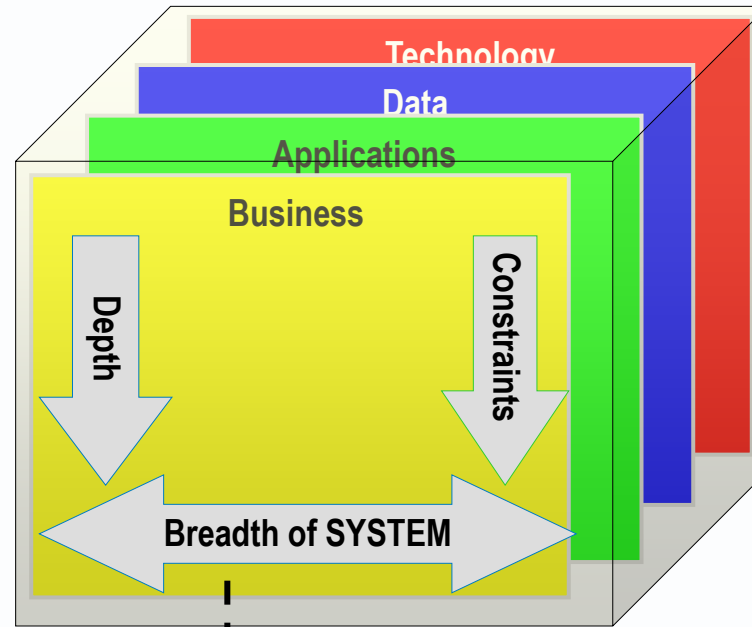
Scoping in several ways (see separate presentation)

Requirements-oriented

What are stakeholders' aims?
Requirements catalogue

What do users want?
Services

What does it do?
Processes



	Behaviour	Structure
External	Service	Interface
Internal	Process	Component

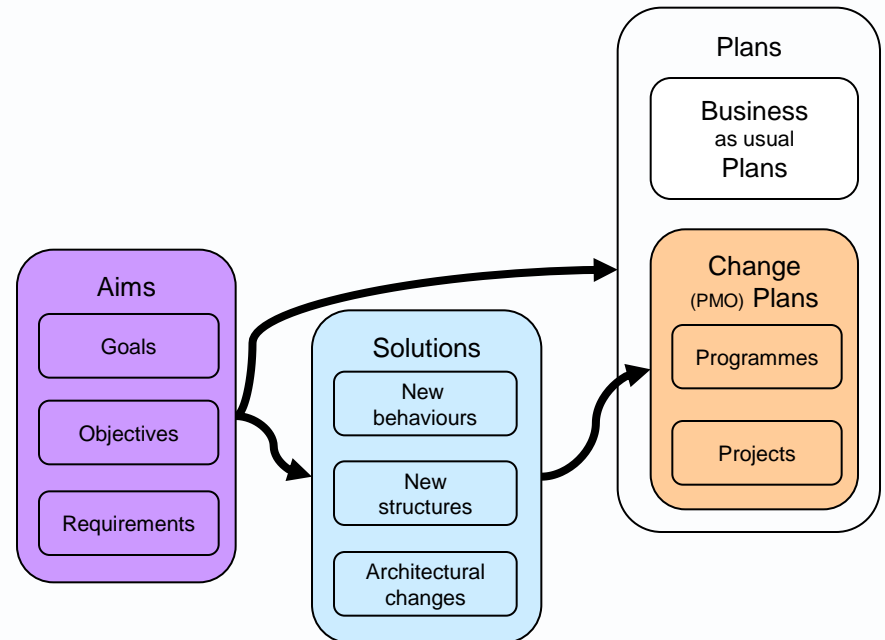
What does it consume and produce?
Context diagram

What is it made of?
Components
Data Structures

Design-oriented

Plan the “architecture project”

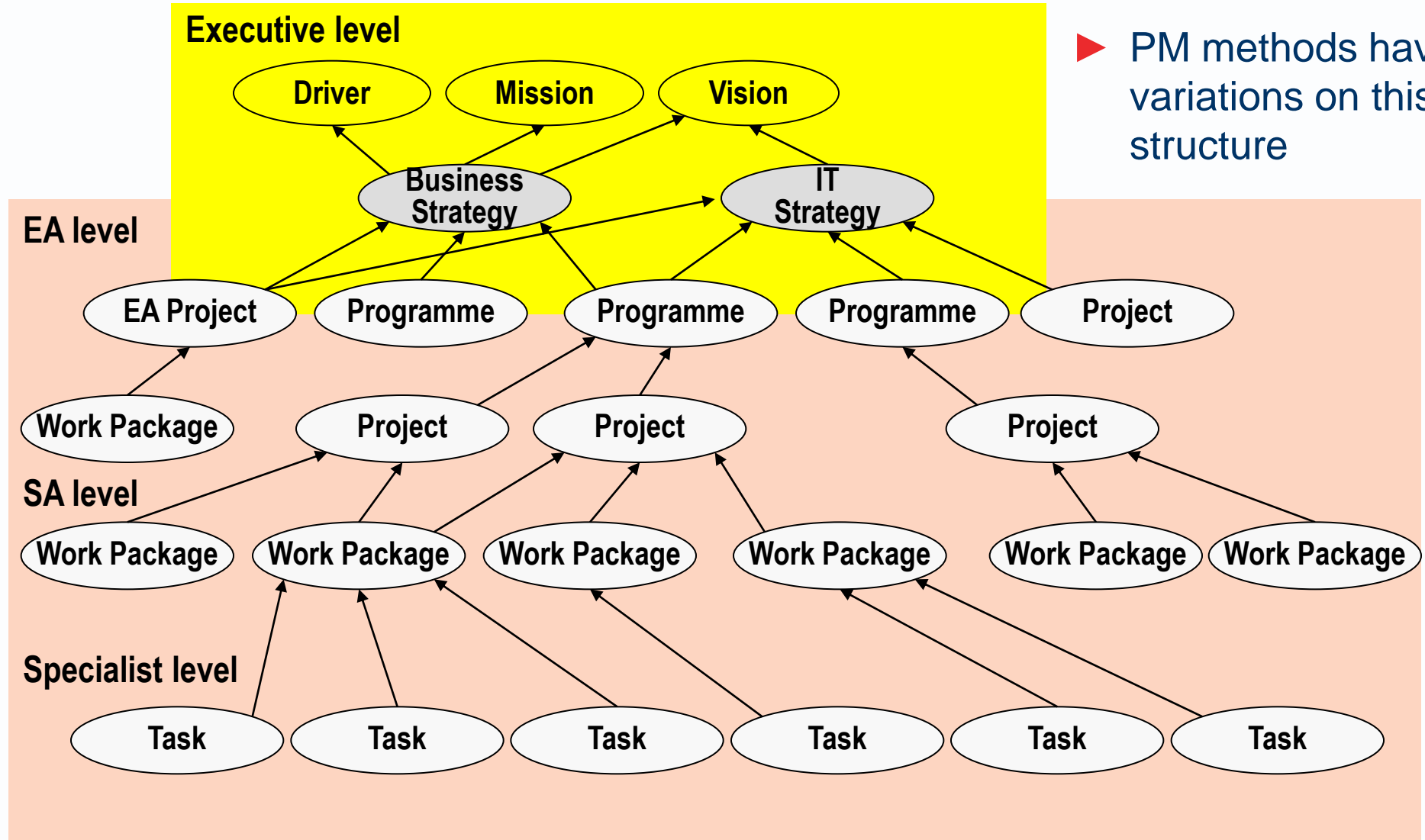
- ▶ Business-as-usual aims cascade down the management structure, as in a balanced score card approach.
- ▶ By contrast, the aims for a one off transformation travel a different route down the organisation via some kind of business change, strategy or enterprise architecture function.



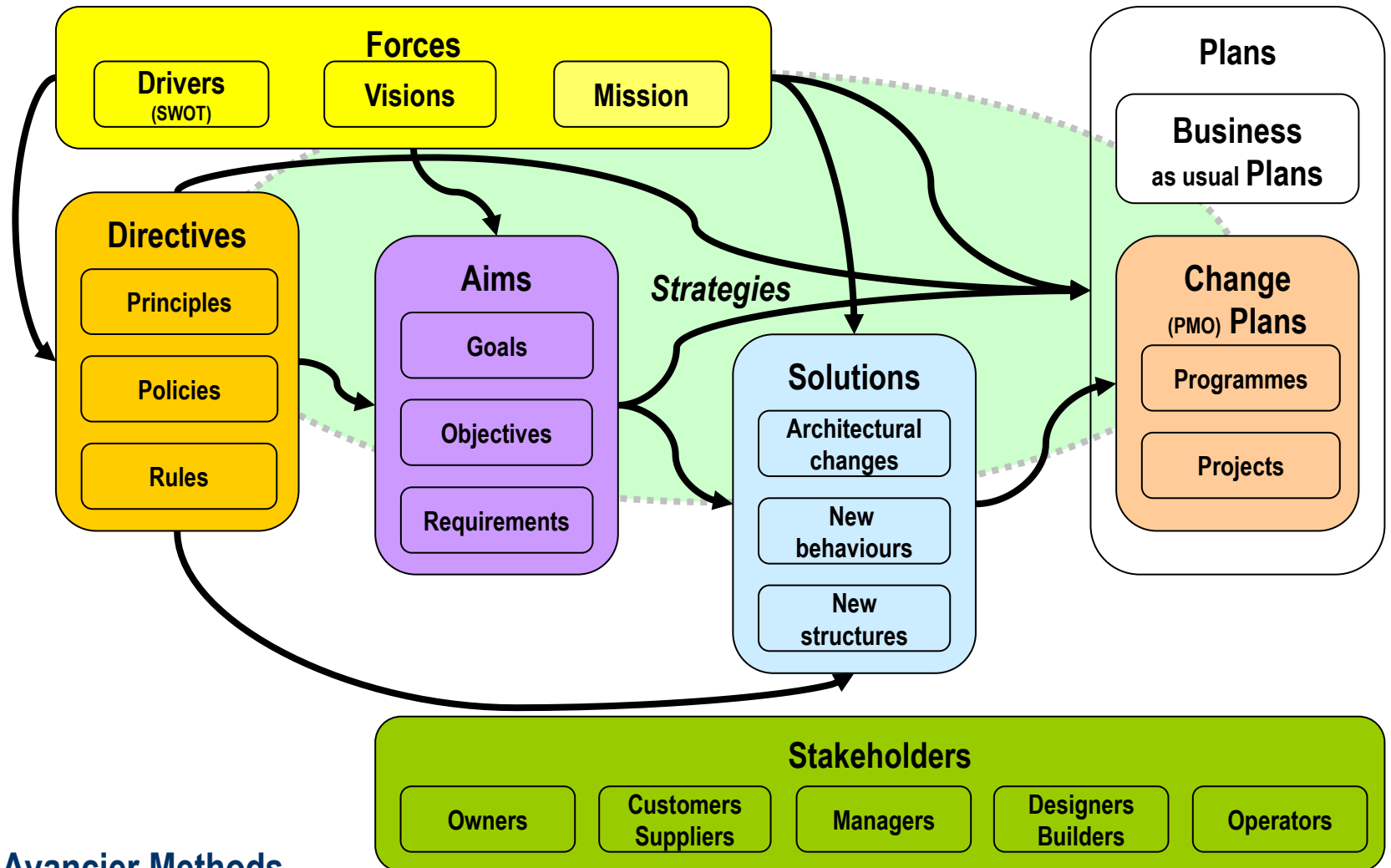
A structured terminology helps people talk about plans at different levels of abstraction. The levelling is more art than science.

A plan hierarchy

► PM methods have variations on this structure



More in other presentations



Scope the Endeavour (AM level 2)

