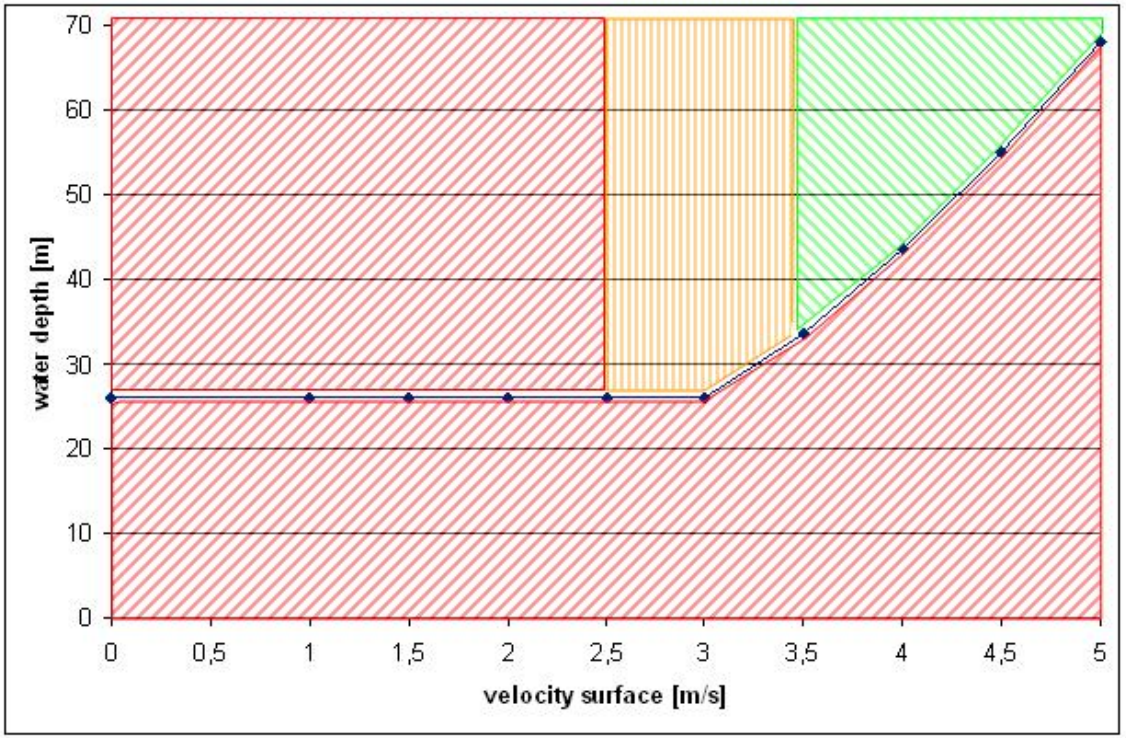
# Tidal site data requirements

# Minimum data required to assess tidal site (I)

1. Water depth and maximum surface current speed at spring tide (parameter combination should fall into green or at least orange area)



# Minimum data required to assess tidal site (II)

1. Scatter diagramme of annual wave climate at a point near to the site
2. Distance to a high voltage grid
3. Free capacity of local grid (fault level)
4. Access for construction and maintenance
5. Location of population centres near to site
6. Any competition for use of sea space

# Additional data, which will be required later for more in depth site development

1. Tidal current speed data gathered over at least 15 days (speed and direction) at minimum at the surface but ideally along the vertical axis from the seabed up to the surface
2. Short term, high resolution accoustic doppler current profiler (ADCP) measurements taken at a frequency of 5Hz along the vertical axis from seabed up to the surface
3. Scatter diagramme of annual wave climate at a point near to the site
4. Soil conditions (Ideally drilling data)
5. Bathymetry of surrounding area
6. Information for environmental impact study.

# The ideal site will have

- Maximum surface current speed at spring tide > 3.5m
- Mean water depth >35m
- An angle between incoming and outcoming current velocity of 180 degrees
- Moderately sloped seabed
- No competing sea users
- Close to a stiff high voltage electricity grid
- Close access to port facilities
- Close access to a potential manufacturing site

*Engineered reliability.*