We have seen that the UK CNI covers 13 sectors: Chemicals; Civil Nuclear; Communications; Defense; Emergency Services; Energy; Finance; Food; Government; Health; Space; Transport; Water.

Seminal work by Rinaldi et al \(^1\) studies dependencies between these different infrastructures and they use graphs such as the following to identify such dependencies:

**Question 1**
Consider a subset of the critical infrastructures that are relevant to Cyprus (for example: energy, water, transport, communications) and develop a dependency graph like the one above.

**Question 2**
Consider the ripple diagrams for the notes such as the one repeated below.

These were produced in 2013, so are a little out of date. Consider each of them in detail see whether you think that they are still representative of what is likely to happen today.

**Question 3**
Using the dependency graph that you developed in Question 1, construct a ripple diagram for failure on one infrastructure and its impact on the others that you have chosen. You might start with one of the diagrams that was included in the notes (cut down to the areas that you have considered) but then try with another such as Transport – here you would have to think what a failure would mean. A few years ago, we had a strike of road haulage companies in the UK and this disrupted fuel supplies and also food supplies fairly quickly.