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By19850316ArthurGolubev20240928ConceptsAndImplementationChecklistForGeneralSystemEngineering

Concepts and implementation checklist for general system engineering

*Concepts block of the checklist:*

1. Dimensions of the system:

1-1 What dimensions of the system are;

1-2 What values of dimensions of the system can be;

2. Parts of the system:

2-1 How the system can be divided;

2-2 What set of functions of parts of the system can be;

2-3 How can parts of the system intercommunicate;

3. Storing information in the system:

3-1 What storing information in the system can provide advantages;

4. Parts of the result:

4-1 What and how storable parts of the result can be get once;

4-2 What and how storable parts of the results can be reused decreasing recalculations;

4-3 Which lifetime needs to for each of the part of the result;

*Implementation block of the checklist:*

5. Intersafeness of the parts of the system:

5-1 How parts of the whole system can control and if required defense and change each other;

6. Reserves of the system:

6-1 What violations of normal processes can be in the system;

6-2 What reserves of the systems are;

7. Costs of variants of implementations in the system:

7-1 What costs (both implementations and maintenance) of variants of implementations in the system are;

8. Interaction of the system with other world:

8-1 What are on the borders of the system with the other world, how to keep it safe and what costs of keeping safety it are;

9. Interaction of the system with users:

9-1 What are the best ways of interacting the system with users;

10. Interaction of the system with technics:

10-1 What are the best ways of interacting the system with technics.

11. Speeds of parts of the system:

11-1. How possible speeds of parts of the system influence on intercommunication of the parts of the system.