5.1 Planning

Before starting the production of an extension, thorough planning is required to facilitate its successful development and subsequent use. This phase should include careful long-term and short-term planning, including consideration of the following topics:

- Scope and design of the extension
- Practical aspects related to extension development
- Ongoing operations and maintenance

The planning phase is about ensuring a balance between the scope and magnitude of the extension and the available resources, and about selecting appropriate methods and processes for the development, implementation and maintenance of the extension. It is important to be as thorough as possible during this phase to avoid unforeseen issues and to mitigate potential issues in subsequent phases of the extension lifecycle.

Planning Topic		Key Questions to Address	Resources
Scope and design	Requirements	 What is the overall purpose of the extension? Who are the main users of the extension? 	2 Introduction 3 Purpose
	Content	 What is the scope of the extension? What type of content will be included in the extension? - e.g. what components and reference sets should be developed and what types of files should be produced? 	4.3.1 Components 4.3.2 Reference Sets
	Prerequisites and dependencies	 Is the extension dependent on other editions, such as the International edition, and if so which editions? Are there other dependencies that influence the development of the extension? For example: Is the extension dependent on other information artifacts, such as other terminologies or classifications, or specific information model standards? 	4.4 Editions 4.2.2 Module Dependencies
Practical aspects of development	Resources	 What resources are required for the development and maintenance of the extension? Note: The resources available should be determined (time, money, people) to ensure a proper balance between the resources available and the tasks involved during each phase of extension development, implementation and maintenance. 	
	Human resources	What roles and competencies are required? For example: Clinical experts Terminology experts Technical and release experts	
	Development approach	What methods will be used for authoring and reviewing the content in the extension and assuring the required level of quality?	5.5 Review and Validation
	Tools	 What tools will be used to support extension development, distribution and maintenance processes? Note: A suite of tools may be required to support the creation and management of an extension. The functional requirements of these tools depend on the extension's scope, content and a range of other factors. 	5.2.1 Tooling Requirements
	Timelines	 When and how often will the extension be released? What is the extension release cycle? What are the key tasks for each step? Who is responsible for each task during the release cycle? What are the key deadlines in the release schedule? Note: It is important to consider both short-term and long-term requirements 	5.7 Maintenance
	Quality assurance	 What level of quality assurance (QA) is required, who will perform the QA, and when? What review methods will be used? 	5.5 Review and Validation
Operations	Distribution	 Will the extension be distributed as an extension or as an edition? Does the release require classification to generate a combined inferred relationship file? How will the standard file naming convention be applied? How will the extension be packaged? What tools or services will be used to distribute the extension? 	5.6 Distribution

Implementati on guidance	 What type of guidance is required for extension consumers? Who will develope the documentation and guidance material? (E.g. implementation guides, webinars, workshops) 	5.6.3 Implementatio n Guidance
Maintenance	What methods and work processes are appropriate for the routine maintenance of the extension? What types of changes will occur, and what tasks and services are required to manage these? What is the release cycle for the extension and/or edition? Will the extension be updated with every version of the International Edition? (Note: This is recommended.) Will the extension be released following a fixed cycle, or will new versions be released on demand? Note: Please be aware that thorough validation and ongoing maintenance is required to ensure the long-term successful use of SNOMED CT.	