### 2.9 WORK BREAKDOWN STRUCTURE

The work breakdown structure (WBS) is used to decompose all the work of the project. It begins at the project level and is successively broken down into finer levels of detail. The lowest level, a work package, represents a discrete deliverable that can be decomposed into activities to produce the deliverable.

The WBS should have a method of identifying the hierarchy, such as a numeric structure. The WBS can be shown as a hierarchical chart or as an outline. The approved WBS, its corresponding WBS dictionary, and the project scope statement comprise the scope baseline for the project.

The WBS can receive information from:

- Scope management plan
- Project scope statement
- Requirements documentation

As part of the scope baseline it provides information to:

- Activity list
- Network diagram
- Duration estimates
- Project schedule
- Cost estimates
- Project budget
- Quality management plan
- Resource management plan
- Activity resource requirements
- Risk register
- Procurement management plan
- Accepted deliverables

The work breakdown structure is an output from the process 5.4 Create WBS in the *PMBOK® Guide* – Sixth Edition. The high levels of the WBS are defined at the start of the project. The lower levels may be progressively elaborated as the project continues.

#### **Tailoring Tips**

Consider the following tips to help tailor the WBS to meet your needs:

- The needs of the project will determine the way that the WBS is organized. The second level determines the organization of the WBS. Some options for organizing and arranging the WBS include:
  - Geography
  - Major deliverables
  - Life cycle phases
  - Subprojects
- For smaller projects you may use a WBS that is depicted like an organizational chart with deliverables in boxes and subordinate deliverables beneath them.
- For larger projects you will need to arrange the WBS in an outline format and provide a numbering structure.

# 50 Planning Forms

- At the beginning of the project you may only have two or three levels of the WBS defined. Through the process of progressive elaboration you will continue to decompose the work into more refined deliverables.
- If your organization has accounting codes you may need to align each deliverable to a specific accounting code to track expenditures.

# **Alignment**

The WBS should be aligned and consistent with the following documents:

- Project charter
- Requirements documentation
- Project scope statement
- WBS dictionary
- Activity list

## **Description**

You can use the element descriptions in Table 2.9 to assist you in developing a work breakdown structure.

TABLE 2.9 Elements of a Work Breakdown Structure

Document Element	Description
Control account	The point where scope, schedule, and cost are integrated and used to measure project performance
Work package	The lowest-level deliverable defined in the WBS for estimating and measuring resources, cost, and duration. Each work package rolls up to one and only one control account for reporting purposes.

# **WORK BREAKDOWN STRUCTURE**

Project Title:	Date Prepared:
•	•

- 1. Project
  - 1.1. Major Deliverable
    - 1.1.1. Control Account
      - 1.1.1.1. Work Package
      - 1.1.1.2. Work Package
      - 1.1.1.3. Work Package
    - 1.1.2. Work Package
  - 1.2. Control Account
    - 1.2.1. Work Package
    - 1.2.2. Work Package
  - 1.3. Major Deliverable
    - 1.3.1. Control Account
      - 1.3.1.1. Work Package
      - 1.3.1.2. Work Package
      - 1.3.1.3. Work Package
    - 1.3.2. Control Account
      - 1.3.2.1. Work Package
      - 1.3.2.2. Work Package