

# ISO/IEC/IEEE 23026:2023-07 (E)

## Systems and software engineering - Engineering and management of websites for systems, software and services information

---

<b>Contents</b>		<b>Page</b>
Foreword .....		vi
Introduction .....		viii
1	Scope .....	1
2	Normative references .....	1
3	Terms, definitions and abbreviated terms .....	1
3.1	Terms and definitions .....	1
3.2	Abbreviated terms .....	5
4	Planning websites .....	6
4.1	Defining the purpose, users, and context of the website .....	6
4.2	Establishing the informational website design and sustainment strategies .....	7
4.2.1	General .....	7
4.2.2	Website plan .....	8
4.2.3	Website maintenance planning .....	8
4.2.4	Website maintenance procedures .....	9
4.3	Establishing the privacy and security strategy .....	9
5	Designing and engineering websites .....	11
5.1	Design goals and website requirements .....	11
5.2	Design principles .....	12
5.3	Choice of devices and media .....	12
5.4	Engineering for website security .....	13
5.4.1	General .....	13
5.4.2	Website operational security procedures .....	14
5.4.3	Website security reviews and audits .....	15
5.5	Engineering for performance, scalability, and sustainability .....	15
5.5.1	General .....	15
5.5.2	Selecting technical formats and standards to use for the website .....	16
5.5.3	Bandwidth efficiencies .....	18
5.5.4	Document type declaration .....	18
5.5.5	Description metatag .....	19
5.5.6	XML considerations .....	19
5.5.7	Image formats, image compression and video .....	19
5.5.8	Server technology independence .....	19
5.5.9	Designing for performance and scale .....	20
6	Testing and evaluating websites .....	21
6.1	Test planning .....	21
6.2	Testing for usability .....	21
6.2.1	General .....	21
6.2.2	Validation of markup language and accessibility conformance .....	22
6.2.3	Operational validation .....	22
6.2.4	Active links .....	23
6.2.5	Dead links .....	23
6.3	Testing for performance and resilience .....	23
6.4	Testing for security .....	24

7	Managing the website .....	24
7.1	Website roles and responsibilities .....	24
7.2	Control of information content .....	25
7.3	Managing security .....	25
8	Sustaining the website .....	26
8.1	General .....	26
8.2	Continuous delivery, content validation, and versioning .....	26
8.3	Handling disconnects .....	27
8.3.1	General .....	27
8.3.2	Site or page relocation .....	27
8.3.3	Redirection .....	27
8.4	Security monitoring and measurement .....	28
8.5	Backups and archiving .....	28
8.5.1	Backups .....	28
8.5.2	Archiving .....	29
9	Website features .....	30
9.1	Web page components .....	30
9.1.1	General .....	30
9.1.2	Website home page .....	31
9.1.3	Identifying the website and its owner .....	31
9.1.4	title, header, and headings .....	32
9.2	Site navigation .....	32
9.2.1	General .....	32
9.2.2	Links .....	33
9.2.3	Offsite warning .....	34
9.2.4	Usage tracking and cookies .....	34
9.2.5	Frames .....	35
9.3	Search and indexing .....	35
9.3.1	General .....	35
9.3.2	Search filtering .....	36
9.3.3	Keywords .....	36
9.3.4	Metadata for indexing .....	36
9.3.5	Flushing search engines .....	36
9.4	Presentation of information .....	37
9.4.1	Presentation of text .....	37
9.4.2	Graphic images .....	37
9.4.3	Animations, 3D, sound, video .....	38
9.4.4	Use of colour in websites .....	38
9.4.5	Time-sensitive content .....	39
9.4.6	Printing from websites .....	41
9.5	Accessibility .....	41
9.6	Website security .....	43
9.6.1	Overall security considerations .....	43
9.6.2	Website security monitoring and measurement .....	43
9.6.3	Web page security designations .....	44
9.6.4	Security of the website code .....	45
9.6.5	Website access and authentication .....	46
9.7	Data management .....	48
9.7.1	General .....	48
9.7.2	Website information integrity .....	48
9.7.3	Data encryption .....	49
9.7.4	Data privacy .....	49
9.7.5	Intellectual property rights .....	51
9.8	User interaction .....	51
9.8.1	Providing user support .....	51
9.8.2	Collaboration and user generated content .....	52
9.9	Translation and localization .....	52
9.9.1	General .....	52
9.9.2	Browser language selection .....	52

9.9.3 Icon use ..... 53  
9.9.4 Holidays and time zones ..... 53  
9.9.5 Place of origin ..... 54  
9.9.6 Hemisphericals ..... 54  
9.9.7 Metric and monetary units ..... 54  
9.9.8 Regulations ..... 54  
9.9.9 Contact information ..... 54  
  
ISO/IEC/IEEE 23026:2023(E) Bibliography ..... 55  
  
IEEE notices and abstract ..... 58