

2022年第6回会議

国際標準化に関する進捗報告

2023年1月19日

高精度衛星測位サービス利用促進協議会(QBIC)
標準化WG

ISO/CD 13657 位置情報交換フォーマット

CD: Committee Draft

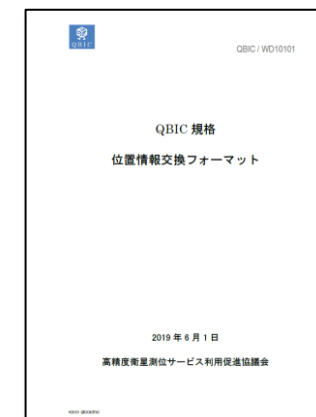
Title	ISO/CD 13657 Space systems –Space-based services – Positioning information exchange service		
NP ballot	Closed on 2022-03-20		
Voting	Approved	AUS, BRA, FIN, FRA, ITA, JPN, KAZ, RUS, UKR	9 nations
	Non-approved	USA	1 nations
	Abstain	CHN, DEU, ESP, IND, GBR, ROU	6 nations
Result	Approved		
Comment	19 comments (FRA: 2, ITA: 6, JPN: 10, USA: 1)		
Status	委員会原案コンサルティング(CDC)段階/ WG1→WG8「宇宙利用サービス」へ移管済		

ISO/CD 13657 位置情報交換フォーマット

The contents have received the feedback from the actual business market (see the lower-right) and the voice of real users is brushing up them.

1. Scope
2. Normative references
3. Terms and definitions
4. Positioning information exchange services
 - 4.1 Basic information (coordinate system, feature size, etc)
 - 4.2 Date and time data
 - 4.3 Positioning result data
 - 4.4 Positioning quality information
 - 4.5 Satellite alignment information
 - 4.6 Velocity and direction data
 - 4.7 Precise measurement point information
 - 4.8 Dynamic coordinate information
 - 4.9 Multi-purpose data
 - 4.10 Contents and formats

Publication for actual market by the QBIC council* in 2018-2022 (Japan).



[Abbreviation] * QBIC: QZSS Business Innovation Council

ISO/CD 13657

位置情報交換 フォーマット

地殻変動補正パラメータ
のコードを記入する。
国別に設定できる。

管理をどうするか？

6.9.1 → Nation and region

The third and fourth items of Table 6.9-1 shall be defined as the reference coordinate system of respective nations and regions.

6.9.2 → Crustal deformation correction

The crustal deformation correction as the sixed item of Table 6.9-1, shall be defined as the difference of coordinates of the secondary realization from coordinates of primary realization, which is defined in ISO 19161-1:2020.

6.9 → Coordinates (G)

The content and format of the Coordinates (G) shall be as shown by Table 6.9-1. The dynamic coordinates are detailed representation considering crustal dynamics. This representation can be applied onto not only stationary features but also moving features, instead of Measurement (B).

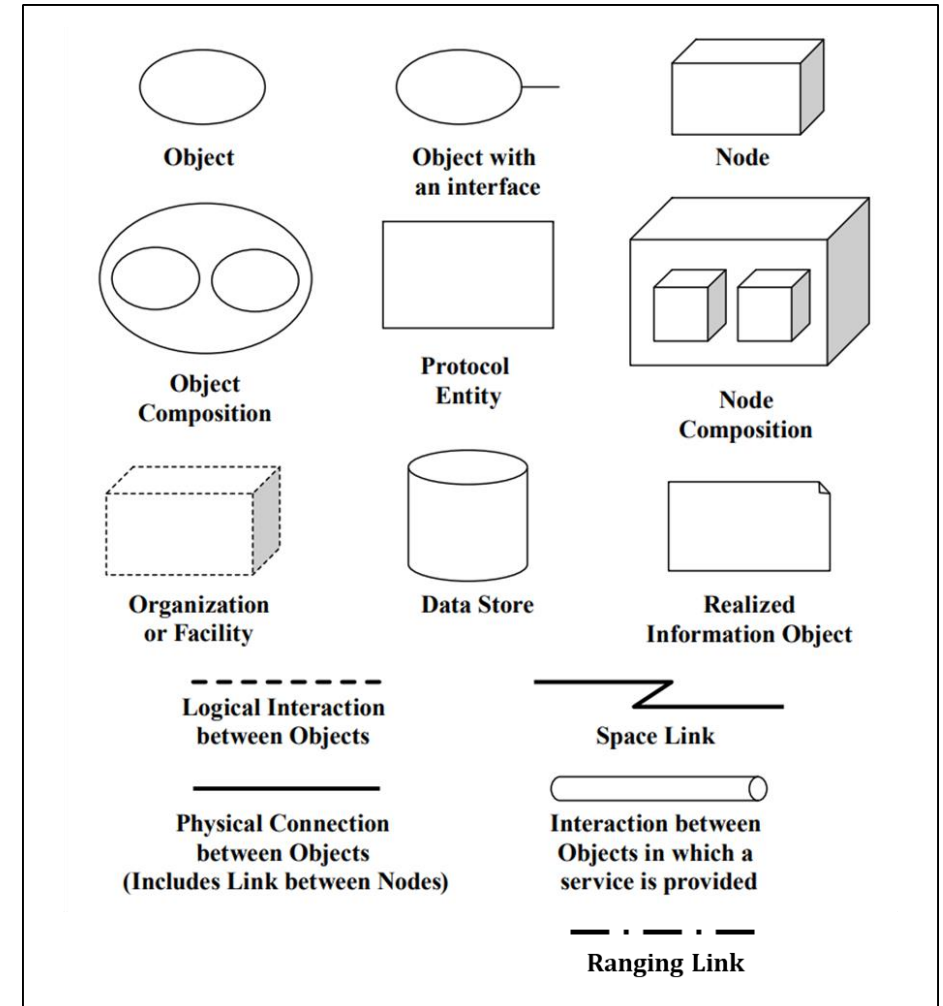
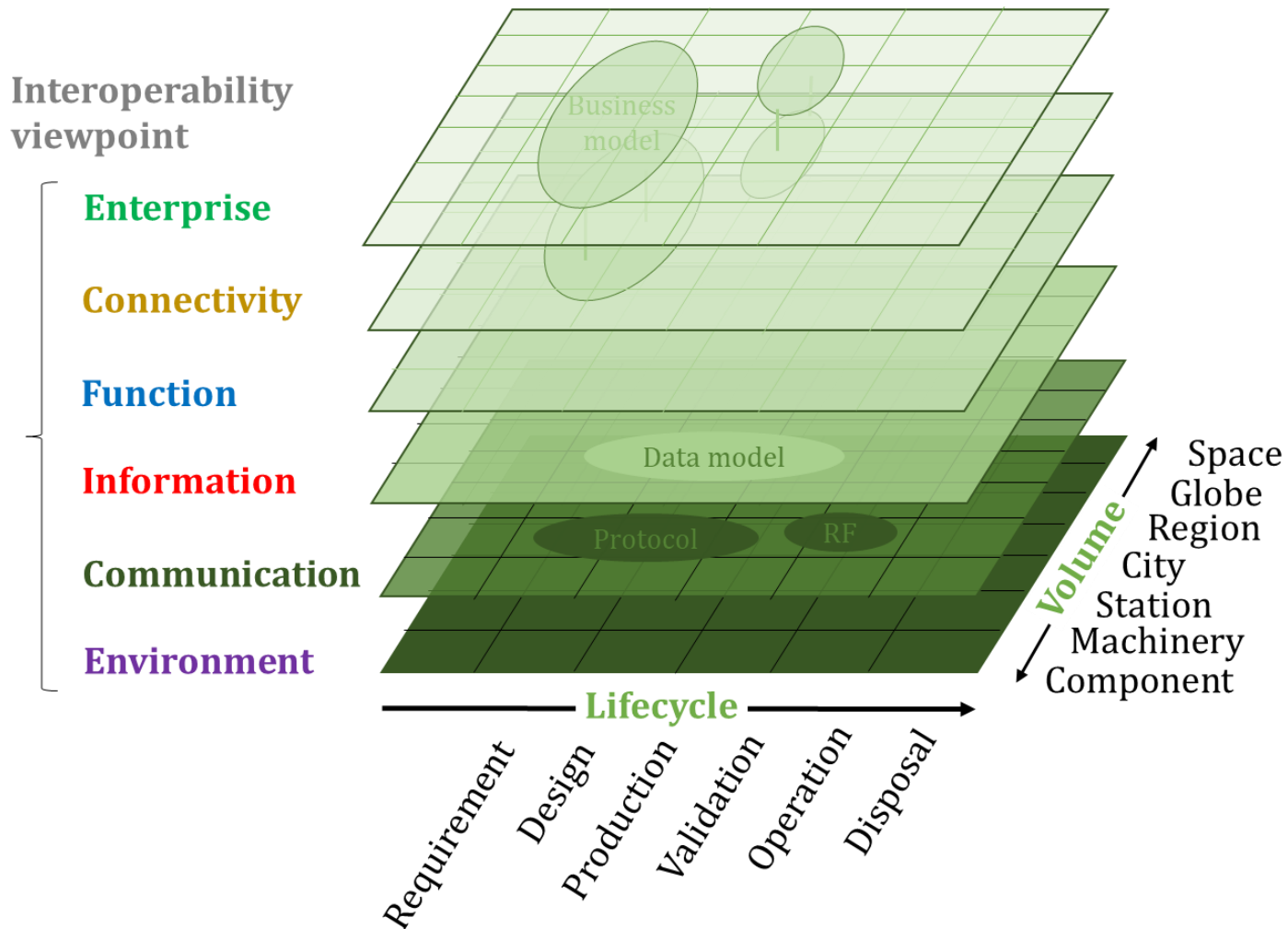
Table 6.9-1 Coordinates (G)

No.	Item	Byte size	Content	Data type	Bit size
1	Message type	1	0x07	unsigned char	8
2	Time of day (UTC)	Hour- Minute- Second	000000 to 235959, BCD 0xFFFFFFFF : Invalid	unsigned char	24
		Under- Second	00~99, BCD 0xFF : Invalid	unsigned char	8
3	Nation or region	2	See 6.9.1	unsigned int	16
4	Coordination system	1	See 6.9.2	unsigned char	8
5	3- dimensional- Position	Latitude	Double-precision- floating-number-[°] IEEE754-2008, binary64 2 ⁶⁴ -1 : Invalid	double	64
		Longitude	Ditto	double	64
		Height	Ditto, Unit [m]	double	64
6	Crustal- deformation- correction See 6.9.2	Latitude	Ditto, Unit [°]	double	64
		Longitude	Ditto, Unit [°]	double	64
		Height	Ditto, Unit [m]	double	64
7	Geoid height	8	Ditto, Unit [m]	double	64
8	Check-sum	1	Check-sum of item no. 1 to 7. (see Note below)	unsigned char	8
	Total	65	-	-	520

Note: The check-sum includes a Header, when these data are connected just behind the Header.

宇宙利用サービスのアーキテクチャ参照モデルの開発

The SC 14 committee promote ISO 13537 Reference Architecture and its extension. It is useful for service and application systems



世界枠組みの再編が急速に進む

フランス政府機関やアメリカ業界の主導でルール形成の再編が急速に進展している。

