

# Contractual Standards for Digital Asset Derivatives

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## Analysis of Existing ISDA Definitional Booklets

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The table in this document presents a high-level analysis of existing ISDA definitional booklets and their potential applicability to digital asset derivatives. This table should be read in conjunction with the ISDA paper on Contractual Standards for Digital Asset Derivatives<sup>1</sup>.

This table is summary in nature. It should not be considered a guide to or an explanation of all relevant issues set out in the Digital Asset Derivatives paper. In presenting this information, ISDA is not expressing a view on the suitability of one or more ISDA definitions booklet(s) as a foundation for developing documentation for digital asset derivatives. This table should be read in conjunction with the paper, which considers the issues relating to developing contractual standards for digital asset derivatives in more detail. This table is not legal advice and should not be relied upon as a basis for providing definitive legal advice.

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<sup>1</sup> See ISDA, Contractual Standards for Digital Asset Derivatives, December 2021, [www.isda.org/2021/12/14/contractual-standards-for-digital-asset-derivatives](https://www.isda.org/2021/12/14/contractual-standards-for-digital-asset-derivatives)

## 1: General Transaction Terms (Excluding Disruption Events)

Event	Equity Definitions (2011) <sup>2</sup>	Equity Definitions (2002) <sup>3</sup>	FX Definitions	2021 Interest Rate Derivatives Definitions	Commodities Definitions
<b>Transaction Type</b>					
Index	Y (Section 2.1.1, 2.4)	Y (Section 1.5)	N	Y (eg, Section 7.5)	Y (Article XI)
Asset	Y (Section 2.1.1)	Y – Share (Section 1.6)	N	N	Y (Section 1.1)
Hedge execution	Y (Section 1.3.8, 1.3.9 and 1.3.10; 1.5; 2.1.1)	Y – Hedge positions (eg, Section 13.2)	N	N	N
Exchange lookalike	Y	Y	N	N	N
<b>Price Source</b>					
Index provider / sponsor	Y (Section 2.4.5)	Y (Section 1.23, 1.28 and 11.4)	Price source specified in settlement rate option/by parties	Y (eg, Section 7.5)	Y (Sub-Annex C Section 11.16)
Market maker (dealer)	Y (Section 8.10.1)	Y (Section 1.23)	Price source specified in settlement rate option/by parties	N	Y – confirms provide for reference dealers
Exchange	Y (Section 2.6)	Y (Section 1.23, 1.25 and 1.26)	Price source specified in settlement rate option/by parties	N	Y (eg, Section 1.4)
<b>Settlement</b>					
Cash settled	Y (Section 3.5.1)	Y (Section 1.38 and Article 8)	Y (Section 1.13)	Y (Section 18)	Y (Section 8.3(e) and 8.7)
Physically settled	Y (Section 3.5.1)	Y (Section 1.39 and Article 9)	Y (Section 5.3(a))	Y (Section 14.2)	Y (Section 8.4(a))
<b>Payout Type</b>					
Spot delivery	Y (Section 7.1.2)	N	Y (Section 1.16(e))	N	Y (Section 1.1)
Option	Y (Section 1.2.5, Article 11)	Y (Section 1.2, Article 3)	Y (Section 1.5, 1.8, 1.16)	Y (Section 12)	Y (Section 8.1)
Forward	Y (Section 1.2.4)	Y (Section 1.3, Article 4)	Y – Forward rate (Section 2.1(a))	Y (Exhibit II-C FRA)	Y (Section 1.1)
Total return	Y	Y (Section 8.6(b))	N	N	N
Swap	Y (Section 1.2.6)	Y – Equity Swap (Section 1.4, Article 5)	N	Y (Exhibit II-J)	Y (Section 1.1)

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<sup>2</sup> The comparison against terms contained in the 2011 Equity Derivatives Definitions is provided for indicative purposes only. As the 2011 Definitions were published but not adopted, there are very few (if any) trades that use them

<sup>3</sup> The comparison against terms contained in the 2002 Equity Derivatives Definitions is provided for indicative purposes only. As the 2002 Definitions are provided as a base set of terms that are amended through the relevant trade confirmation, there are very few (if any) trades that use the 2002 Definitions in their published, standard form

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Event	Equity Definitions (2011)	Equity Definitions (2002)	FX Definitions	2021 Interest Rate Derivatives Definitions	Commodities Definitions
Other					
Valuation date	Y (Section 5.1(xxxi))	Y (Section 6.2)	Y (Section 1.16(f))	Y – Cash settlement valuation date (Section 18.4.9)	Y – Pricing date (Section 6.2(b))
Valuation time	Y (Article 6)	Y (Section 6.1)	N	Y – Cash settlement valuation time (Section 18.4.10)	N
Averaging	Y (Section 7.3)	Y (Section 6.7)	Y (Section 3.8)	Y (Section 6.7.2, Section 7)	Y (Section 6.2(a)(ii)(C))
Settlement date	Y – Various – ED transaction settlement date (Section 16.2.4)	Y (Section 9.4)	Y (Section 1.24)	N	Y (Section 3.3)
Premium	Y (Section 16.3.9)	Y (Section 2.4)	Y (Section 3.4)	Y (Section 12.5.3)	Y (Section 8.6)
Disruption events	Y (Article 9, Article 17 and Article 19)	Y (eg, Section 12.9)	Y (Section 5.1)	N	Y (eg, Section 7.4, Sub-Annex C Section 11.18)
Calculation agent	Y (Section 1.3.11, 15.2, 15.6)	Y (Section 1.40)	Y (Section 1.3)	Y (eg, Section 1.2)	Y (Section 4.5)

## 2: Relevant Disruption Events

Disruption Event	Description of Concept	Potential Application to Digital Asset Derivatives	Equity Definitions (2011)	Equity Definitions (2002)	FX Definitions (1998)	Interest Rate Derivatives Definitions (2021)	Commodity Definitions (2005)
Inconvertibility or non-transferability	Risks arising out of events that make it impossible to convert one currency into another on the settlement date, or to transfer currencies across borders (or sometimes within the same jurisdiction)	Potentially applicable where it becomes impossible to convert a digital asset into a fiat currency. Note there is generally no right to redeem native digital assets for fiat currency on a distributed platform	Y (Section 19.6.3)	N	Y (Section 5.1(d)(vii))	N	N
Price source disruption	Risks related to a lack of available rates from external sources (which may occur due to temporary disruptions or permanent cessations)	Potentially applicable if, for example, a digital asset trading venue acts as the primary price source. Amendments may be required to reflect specific features of the market (eg, lack of primary trading venue)	Y (Sections 9.3.44, 9.3.47 – 9.3.50, 9.3.52 – 9.3.58)	N	Y (Section 5.1(d)(xi))	N	Y (Section 7.4(c)(i))
Illiquidity	Risks related to illiquidity in the currency markets	May be relevant given possibility of illiquidity in digital asset markets. Amendments may be required to reflect specific features of the market (eg, continuous nature of the market)	Y <sup>4</sup> (Section 19.8)	Y (Section 12.9(a)(iii))	Y (Section 5.1(d)(vi))	N	N
Local market risk	Risks associated with assets that are issued or held in a particular jurisdiction due to, for instance, nationalization or governmental authority default	Potentially applicable where, for example, holding or dealing in a specific digital asset is banned or restricted in a specific jurisdiction	N	N	Y (Section 5.1(d)(ix))	N	N
Mergers	If there is a merger, takeover or transfer of all shares in the underlying entity (ie, the issuer of an underlying security) to another entity	Could be adapted to address forks in the underlying blockchain protocol	Y (Section 19.2.5)	Y (Section 12.1(b))	N	N	N
Change in law	If it becomes illegal to hold the underlying security or a change in law or regulation means it becomes materially more expensive to continue performing under the transaction	Potentially applicable where, for example, holding or dealing in a specific digital asset is banned or restricted in a specific jurisdiction or prudential treatment becomes more onerous	Y (Section 19.5)	Y (Section 12.9(a)(ii))	N	N	N

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<sup>4</sup> Both equity derivatives definitions refer to illiquidity in the market as a potential trigger of failure to deliver, but not as a distinct disruption event

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Disruption Event	Description of Concept	Potential Application to Digital Asset Derivatives	Equity Definitions (2011)	Equity Definitions (2002)	FX Definitions (1998)	Interest Rate Derivatives Definitions (2021)	Commodity Definitions (2005)
Nationalization, insolvency and delisting	If (i) the shares or substantially all the assets of an issuer are nationalized; (ii) an issuer becomes insolvent; or (iii) an exchange announces that the relevant shares will cease to be listed or traded publicly	Unlikely to be relevant where digital asset(s) is/are decentralized. Could be relevant with respect to the asset underlying an asset-referenced digital asset	Y (Sections 19.2.6, 19.9 and 19.2.1)	Y (Section 12.6)	Y (for nationalization only) (Section 5.1(d)(ix))	N	N
Extraordinary dividends	If the issuer of the underlying security announces an extraordinary dividend	Potentially applicable to account for allocation of mining and transaction fees or where the underlying digital asset allows for 'airdrops' (ie, distribution of assets to all participants on the platform)	Y (Section 19.2.7)	Y (Section 10.6 and 11.2(e)(iii))	N	N	N
Hedging disruption	If the hedging party is unable to maintain its hedging position, or its hedging costs change	Potentially applicable, although consider how the digital asset would likely be hedged (eg, by holding the actual asset)	Y (Sections 9.3.45 – 9.3.46)	Y (Section 12.9(a)(v))	N	N	N
Valuation date disruption	Failure of an exchange to open for trading, early closure of exchange or other trading/exchange disruption on valuation date	Potentially applicable but may need to be adapted to address specific features of the market (eg, lack of primary trading venue)	Y (Section 19.6.2)	Y (Section 6.6)	N	N	N
Settlement disruption	An event beyond the control of the parties such that settlement cannot be effected	Potentially applicable, but may need to be adapted to address unique types of settlement disruption, for example in the technology platform	Y (Sections 9.3.47 – 9.3.48)	N	Y (Section 5.1(d)(viii))	N	N
Trading disruption	The suspension of or limitation imposed on trading in the underlying	Potentially applicable but may need to be adapted to address specific features of the market (eg, lack of primary trading venue)	Y <sup>5</sup> (Sections 9.3.1 - 9.3.21)	Y (Section 6.3(a))	N	N	Y (Section 7.4(c)(ii))
Tax disruption	The imposition or change in any tax treatment measured by reference to the relevant underlying by any government or taxation authority	Potentially applicable to digital assets where the tax status has not been settled	Y (eg, Section 19.5.11)	Y (Section 12.9(a)(ii))	N	N	Y (Section 7.4(c)(vi))

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<sup>5</sup> In relation to a traded underlying asset, index or basket, a suspension or limitation imposed on trading in underlying (and in the case of an index or basket, either the whole or a component of the underlying): see Sections 9.3.1-9.3.21

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Disruption Event	Description of Concept	Potential Application to Digital Asset Derivatives	Equity Definitions (2011)	Equity Definitions (2002)	FX Definitions (1998)	Interest Rate Derivatives Definitions (2021)	Commodity Definitions (2005)
Dual exchange rate	With respect to the settlement rate option, the currency exchange rate specified in such settlement rate option splits into dual or multiple currency exchange rates	Could potentially be adapted to address forks in the underlying blockchain protocol	N	N	Y (Section 5.1(d)(ii))	N	N
Index disruption	Any disruption, change or modification to an index or index components	Potentially applicable where the price source is an index, but may need to be adapted to reflect specific features of the market (eg, potential lack of transparency)	Y (Sections 9.3.2 – 9.3.11)	Y (Section 11.1(b))	N	N	N
Custodian events	Risk of a default by any custodian with which the assets are held or the imposition of legal or regulatory restrictions that prevent the assets being sold or transferred	Potentially applicable where digital asset custodians are used to hold the underlying digital asset. Amendments may be required to reflect specific features of the market (eg, nature of custodians)	Y (eg, Section 20.10.13)	N	N	N	N
Material change in formula	A material change in the formula for or the method of calculating the relevant commodity reference price	May be relevant to index trades. Amendments may be required to reflect specific features of the market (eg, potential lack of transparency)	Y (Section 19.2.4)	N	N	N	Y (Section 7.4(c)(iv))
Material change in content	A material change in the content, composition or constitution of the relevant derivative	This may have potential application to a fork event	Y (Section 19.2.7(i))	N	N	N	Y (Section 7.4(c)(v))
Derivatives contract unacceptable relocation	Where the listing, quotation or trading of a security or derivatives contract relocates to an exchange, quotation system or execution facility that is not an acceptable securities or derivatives exchange as determined by the calculation agent	May be relevant to exchange lookalike contracts. Amendments may be required to reflect specific features of the market (eg, lack of primary trading venue)	Y (Sections 9.3.22, 9.3.59)	N	N	N	N
Exchange events: early closures	In relation to a security, index or basket, the closure of the related exchange on which the underlying or a component is traded prior to its scheduled close	May be relevant if trading venue is closed at stated pricing times, despite continuous nature of the market	Y (Sections 9.3.23 – 9.3.29)	Y (Section 6.3(d))	N	N	N

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Disruption Event	Description of Concept	Potential Application to Digital Asset Derivatives	Equity Definitions (2011)	Equity Definitions (2002)	FX Definitions (1998)	Interest Rate Derivatives Definitions (2021)	Commodity Definitions (2005)
Exchange events: late openings	In relation to a security, index or basket, the late opening of the related exchange on which the underlying or a component is traded prior to its scheduled close	May be relevant where trading venue is closed at stated pricing times, despite continuous nature of the market	Y (Sections 9.3.30 – 9.3.36)	N	N	N	N
Exchange events: failures to open	In relation to a security, index or basket, the failure of the related exchange to open for trading at any time during its regular trading session	May be relevant to exchange lookalike contracts or if pricing by reference to one or more trading venues. Amendments may be required to address specific features of the market (eg, lack of primary trading venue)	Y (Sections 9.3.37 – 9.3.43)	Y (Section 6.4)	N	N	N
Exchange events: disrupted day	Any scheduled trading day on which a relevant exchange fails to open for trading	May be relevant if trading venue is closed at stated pricing times, despite continuous nature of the market	Y (Sections 9.3.30 – 9.3.36)	Y (Section 6.4)	N	N	N
Pricing disruption derivatives contract adjustment	In relation to a derivatives contract, trading commenced and has not been permanently discontinued, but an official daily settlement price is not available	May be relevant to exchange lookalike contracts. Amendments may be required to reflect specific features of the market (eg, lack of official settlement price)	Y (Sections 9.3.47 – 9.3.50)	N	N	N	N
Disappearance of reference price	Relates to the permanent discontinuation of trading or unavailability of the relevant derivative	May be relevant to index trades	Y (Section 9.8)	N	N	N	Y (Section 7.4(c)(iii))

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Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 960 member institutions from 78 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In

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