LEVEL 2 RIC STRUCTURES - GLOBAL EXCHANGES – ALL INSTRUMENTS

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`1' as Prefix for level 2 RICs

RIC Elements	Example	Definition
Prefix	1	Level 2/Order Book indicator
Primary Element	ABCD	RIC Root
Component 1	1234	Strike Price (Options)
Component 2	L	Expiry Month (Futures and Options)
Component 3	9	Expiry Year (Futures and Options)
Delimiter		Can be alternative (e.g. =)
Suffix	AB	Exchange Identifier
Example:		1ABCD1234L9.AB

				Fixed		Stock	Other
Country	Exchange	Levels	Equity	Income	Options	Futures	Futures
	Amman Stock	_	~				
Jordon	Exchange	5	v				
	Oesterreichische						
Austria	Termin und	10				\checkmark	\checkmark
Austria	Optionenboerse	10				•	•
Austria	Vienna Stock Exchange	10	✓	\checkmark			
Austria	Bahrain Stock	10					
Bahrain	Exchange	5	\checkmark				
Czech	Prague Stock						
Republic	Exchange	10	\checkmark				
	OMX Copenhagen						
Denmark	Stock Exchange	10	\checkmark				
	OMX Tallinn Stock						
Estonia	Exchange	10	\checkmark				
	OMX Helsinki Stock						
Finland	Exchange	10	\checkmark				
Germany	Xetra	10	✓				
Germany	Eurex	10				\checkmark	\checkmark
	Athens Stock						
Greece	Exchange	10	\checkmark				
	Athens Derivative						1
Greece	Exchange	10			\checkmark		~
	Budapest Stock		~	\checkmark	\checkmark	\checkmark	\checkmark
Hungary	Exchange	10	v	*	v	v	v
Teelend	Iceland Stock	10	~				
Iceland	Exchange Dublin Stock	10	•				
Ireland	Exchange	10	✓				
Italy	Borsa Italia	10			✓	✓	
Italy	Kuwait Stock	10					
Kuwait	Exchange	10	✓				
Ramate	OMX Riga Stock	10		1			
Latvia	Exchange	10	\checkmark				
	OMX Vilnius Stock		1				
Lithuania	Exchange	10	\checkmark				

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Country	Exchange	Levels	Equity	Fixed Income	Options	Stock Futures	Other Futures
Luxembourg	Luxembourg Stock Exchange	10	~				
Oman	Muscat Stock Exchange	5	~	~			
Romania	Bucharest Stock Exchange	10	\checkmark				
Russia	MICEX	10	\checkmark	✓			
Russia	RTS	10	\checkmark				
Sweden	OMX Stockholm	10	✓				
Switzerland	SWX	10	\checkmark	✓			
Switzerland	Virt-x	10	~				
Turkey	Istanbul Stock Exchange (from Feb 2009)	5	√				
MTF	NASDAQ OMX						

'1' as Prefix for level 2 RICs continued...

`D' as Prefix for level 2 RICs

RIC Elements	Example	Definition
Prefix	D	Level 2/Order Book indicator
Primary Element	ABCD	RIC Root
Component 1	1234	Strike Price (Options)
Component 2	L	Expiry Month (Futures and Options)
Component 3	9	Expiry Year (Futures and Options)
Delimiter		Can be alternative (e.g. =)
Suffix	AB	Exchange Identifier
Example:		DABCD1234L9.AB

Country	Exchange	Levels	Equity	Fixed Income	Options	Stock Futures	Other Futures	Warrants and Funds
country	Sydney		Lquity	Income	options	1 4641 65	1 4141 65	
Australia	Futures	-						
Australia Belgium	Exchange	5					✓	
France								
Netherlands	LIFFE, part of NYSE	10						
Portugal	Euronext	10						
London						\checkmark	~	
	Winnipeg							
Canada	Commodities	10						
Canada	Exchange Hong Kong	10					✓	
	Futures							
Hong Kong	Exchange	5			✓	\checkmark	✓	
Japan	Tokyo Stock	8	✓					✓
	Exchange	10			✓	✓	✓	
	Osaka Securities	8	✓					✓
Japan	Exchange							
	(including	10			\checkmark	\checkmark	\checkmark	
	Hercules) Nagoya Stock	10			•	•	•	
Japan	Exchange	8	✓					
•	Fukuoka							
Japan	Stock Exchange	8	\checkmark					
заран	Sapporo	0	Ŷ					
	Stock							
Japan	Exchange	8	✓					
Japan	JASDAQ SBI	8	√					
Japan	Jappanext	8	~					
•								
Japan	kabu.com	Terminated						
	Tokyo Commodity							
Japan	Exchange	10			~		\checkmark	

Country	Exchange	Levels	Equity	Fixed Income	Options	Stock Futures	Other Futures	Warrants and Funds
Japan	Japan Electric Power Exchange	Level 2 not supported						
Taiwan	Taiwan Stock Exchange	5	~	~				✓
Taiwan	GreTai Securities Market	5	~	~				\checkmark
United Kingdom	ICE (IPE)	10					\checkmark	
United Kingdom	LME	10					\checkmark	
United States	New York Board of Trade	Now part of ICE US						
Singapore	Singapore Stock Exchange	20				~	\checkmark	
India	National Stock Exchange	5			\checkmark	\checkmark	\checkmark	

`0' as Prefix for level 2 RICs

RIC Elements	Example	Definition			
Prefix	0	Level 2/Order Book indicator			
Primary Element	ABCD	RIC Root			
Component 1	1234	Strike Price (Options)			
Component 2	L	Expiry Month (Futures and Options)			
Component 3	9	Expiry Year (Futures and Options)			
Delimiter		Can be alternative (e.g. =)			
Suffix	AB	Exchange Identifier			
Example:	OABCD1234L9.AB				

Country	Exchange	Levels	Equity	Fixed Income	Options	Stock Futures	Other Futures	Warrants and Funds
Netherlands	Euronext Amsterdam	10	\checkmark	✓				✓
Portugal	Euronext Lisbon	10	\checkmark	✓				✓
Spain	MEFF Renta Variable	5			\checkmark	✓	\checkmark	
Spain	LATIBEX	10	\checkmark					
Spain	Mercado Continuo Stock Exchange	10	~		~			\checkmark
France	Euronext Paris	10	\checkmark	\checkmark				\checkmark
Belgium	Euronext Brussels	10	✓	✓				 ✓

'2' before Suffix for level 2 RICs

RIC Elements	Example	Definition			
Primary	ABCD	RIC Root			
Element					
Component 1	1234	Strike Price (Options)			
Component 2	L	Expiry Month (Futures and Options)			
Component 3	9	Expiry Year (Futures and Options)			
Component 4	2	Level 2 Indicator			
Delimiter		Can be alternative (e.g. =)			
Suffix	AB	Exchange Identifier			
Example:	ABCD1234L92.AB				

Country	Exchange	Levels	Equity	Fixed Income	Options	Stock Futures	Other Futures	Warrants and Funds
India	Bombay Stock Exchange	5	\checkmark					
India	National Stock Exchange	5	~					

'D' before Suffix for level 2 RICs

RIC Elements	Example	Definition				
Primary	ABCD	RIC Root				
Element						
Component 1	1234	Strike Price (Options)				
Component 2	L	Expiry Month (Futures and Options)				
Component 3	9	Expiry Year (Futures and Options)				
Component 4	D	Level 2 Indicator				
Delimiter						
Suffix	AB	Exchange Identifier				
Example:	ABCD1234L9D.AB					

Country	Exchange	Levels	Equity	Fixed Income	Options	Stock Futures	Other Futures	Warrants and Funds
Qatar	Doha Stock Exchange	5	~					
Saudi Arabia	Saudi Stock Market (Tadawul)	10	~					
United Arab Emirates	Dubai Financial Market	10	~					
United Arab Emirates	Abu Dhabi Securities Market	10	~					

'B' as Suffix for level 2 RICs

RIC Elements	Example	Definition		
Primary Element	ABCD	RIC Root		
Component 1	1234	Strike Price (options)		
Component 2	L	Expiry Month		
Component 3	9	Expiry Year		
Delimiter	•	Can be alternative (e.g. =)		
Suffix	AB	Exchange Identifier		
Service Descriptor	В	Level 2 Indicator		
Example:	ABCD1234L9.ABB			

Country	Exchange	Levels	Equity	Fixed Income	Options	Stock Futures	Other Futures	Warrants and Funds
All MTS Markets	MTS	10		✓				
	Borsa							
Italy	Italia	10	\checkmark	✓				\checkmark

'd' as Suffix for level 2 RICs

RIC Elements	Example	Definition			
Primary Element	ABCD	RIC Root			
Component 1	1234	Strike Price (options)			
Component 2	L	Expiry Month			
Component 3	9	Expiry Year			
Delimiter		Can be alternative (e.g. =)			
Suffix	AB	Exchange Identifier			
Service Descriptor	d	Level 2 Indicator			
Example:	ABCD1234L9.ABd				

				Fixed		Stock	Other	Warrants and
Country	Exchange	Levels	Equity	Income	Options	Futures	Futures	Funds
United Kingdom	Boat	10	\checkmark					
United Kingdom	Turquoise	10	\checkmark					
United Kingdom	Equiduct	10	\checkmark					
South Africa	SAFEX	10				\checkmark	✓	
Nigeria	SE	10	\checkmark				\checkmark	
Norway	Oslo SE	10	\checkmark	✓				✓
China	Hong Kong	10	\checkmark					
Poland	Warsaw Stock Exchange	5	~	~	~	\checkmark	\checkmark	~
Singapore	Singapore Stock Exchange	20	\checkmark	✓				✓
India	Ace Commodity Exchange	5					\checkmark	
India	Multi Commodity Exchange of India	5					\checkmark	
	Market for Alternative		\checkmark					
Thailand	Investment (MAI)	3						

`m' as Suffix for level 2 RICs

RIC Elements	Example	Definition
Primary Element	ABCD	RIC Root
Component 2	L	Expiry Month
Component 3	9	Expiry Year
Service Descriptor	m	Level 2 Indicator
Example:	ABCDL	

				Fixed		Stock	Other	Warrants
Country	Exchange	Levels	Equity	Income	Options	Futures	Futures	and Funds
United States	СВОТ	10					✓	
United States	NYMEX	10					✓	
Brazil	BMF	10					\checkmark	
Argentina	ROFEX	10			✓		✓	

`O' as Suffix for level 2 RICs

RIC Elements	Example	Definition					
Primary Element	ABCD	RIC Root					
Component 1	1234	Strike Price (options)					
Component 2	L	Expiry Month					
Component 3	9	Expiry Year					
Delimiter		Can be alternative (e.g. =)					
Suffix	AB	Exchange Identifier					
Service Descriptor	0	Level 2 Indicator					
Example:	ABCD1234L9.ABO						

Country	Exchange	Levels	Equity	Fixed Income	Options	Stock Futures	Other Futures	Warrants and Funds
United Kingdom	London Stock Exchange	10	~					\checkmark
Namibia	Namibian Stock Exchange	10	\checkmark					\checkmark

'YO' as Suffix for level 2 RICs

RIC Elements	Example	Definition		
Primary Element	ABCD	RIC Root		
Component 1	1234	Strike Price (options)		
Component 2	L	Expiry Month		
Component 3	9	Expiry Year		
Delimiter		Can be alternative (e.g. =)		
Suffix	AB	Exchange Identifier		
Service Descriptor	YO	Level 2 Indicator		
Example:	ABCD1234L9.ABYO			

Country	Exchange	Levels	Equity	Fixed Income	Options	Other Futures	Warrants and Funds
United States	New York Stock Exchange	10	\checkmark				~

'BST' as a separate Suffix for level 2 RICs

RIC		
Elements	Example	Definition
Primary Element	ABCD	RIC Root
Component 1	1234	Strike Price (options)
Component 2	L	Expiry Month
Component 3	9	Expiry Year
Delimiter		Can be alternative (e.g. =)
Suffix	TWO	Exchange Identifier Level 1
	BST	Exchange Identifier Level 2
Example:	ABCD12	234L9.BST

Country	Exchange	Levels	Equity	Fixed Income	Options	Stock Futures	Other Futures	Warrants and Funds	Money Markets
Taiwan	GreTai Securities Market - Electric Bond Trading System	6		\checkmark					

Level 1: (F01401=TWO) Level 2: Composite Chain (0#TWINTL=TWO), Market Depth (F01401=BST)

Multiple values as Prefix for level 2 RICs

RIC Elements	Example	Definition
Prefix	multiple	Level 2/Order Book indicator
Primary	ABCD	RIC Root
Element		
Component 1	1234	Strike Price (Options)
Component 2	L	Expiry Month (Futures and Options)
Component 3	9	Expiry Year (Futures and Options)
Delimiter		Can be alternative (e.g. =)
Suffix	AB	Exchange Identifier
Evemples	1 AE	3CD1234L9.AB
Example:	5 AE	3CD1234L9.AB

Country	Exchange	Levels	Equity	Fixed Income	Options	Stock Futures	Other Futures	Warrants and Funds
Australia	Australian Stock	1 prefix 1-5						
	Exchange	2 prefix 6-10						
		3 prefix 11-15						
		4 prefix 16-20	\checkmark					\checkmark
		1 prefix 1st level						
		2 prefix 2nd level						
		3 prefix 3rd level	\checkmark					
	Casablanca Stock	4 prefix 4th level						
Morocco	Exchange	5 prefix 5th level						
		1 prefix 1-5						
		2 prefix 6-10						
	New Zealand Stock	3 prefix 11-15						
New Zealand	Exchange	4 prefix 16-20	\checkmark					\checkmark
		D1 prefix 1-10						
	Tokyo Finacial	D2 prefix 11-20						
Japan	Exchange	D3 prefix 21-30	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
	Singapore Stock	D01 prefix 1-10						
Singapore	Exchange	D10 prefix 41-50		\checkmark	\checkmark		\checkmark	\checkmark
		1 prefix 1st level						
		2 prefix 2nd level						
		3 prefix 3rd level						
	Tunis Stock	4 prefix 4th level						
Tunisia	Exchange	5 prefix 5th level	\checkmark					
	-	DA prefix 1 st level						
Japan	TSE Arrowhead	DB prefix 2 nd level	\checkmark					

Multiple values as Suffix for level 2 RICs

RIC Elements	Example	Definition					
Primary Element	ABCD	RIC Root					
Component 1	1234	Strike Price (options)					
Component 2	L	Expiry Month					
Component 3	9	Expiry Year					
Delimiter		Can be alternative (e.g. =)					
Suffix	AB	Exchange Identifier					
Service Descriptor	p or q	Level 2 Indicator					
Example:	ABCD1234L9.ABq						
	ABCD1234L9.ABp						

Country	Exchange	Levels	Equity	Fixed Income	Options	Stock Futures	Other Futures	Warrants and Funds
Canada	Toronto Stock	"q" added to suffix (MBO)						
	Exchange	"p" added to suffix (MBP)	✓	\checkmark				✓
Canada	TSX Venture	"q" added to suffix (MBO)						
	Exchange	"p" added to suffix (MBP)	\checkmark	\checkmark				\checkmark
Canada	CNQ - Canada's	"q" added to suffix (MBO)						
	new Stock Exchange	"p" added to suffix (MBP)	~					\checkmark
Canada	CNQ - Canada's	"q" added to suffix (MBO)						
	new Stock Exchange	"p" added to suffix (MBP)	~					\checkmark
Canada	CHI-X	"p" added to suffix (MBP)	\checkmark	\checkmark				\checkmark

RIC Elements	Example	Definition				
Primary		RIC Root				
Element	ABCD					
Component 1	1234	Strike Price (Options)				
Component 2	L	Expiry Month (Futures and Options)				
Component 3	9	Expiry Year (Futures and Options)				
Delimiter		Can be alternative (e.g. =)				
Suffix	AB	Exchange Identifier				
Example:	AB	BCD1234L9.AB				

Level 1 and Level 2 data bundled into single RIC

Country	Exchange	Levels	Equity	Fixed Income	Options	Stock Futures	Other Futures	Warrants and Funds
China	Shanghai Stock Exchange	10		~				
China	Shenzen Stock Exchange	5	~	~				√
Croatia	Zagreb Stock Exchange	5 Equity 3 Fixed Income	~	~				\checkmark
Cyprus	Cyprus Stock Exchange	5	~	~				~
Germany	Hannover Commodity Exchange	3					~	
Hong Kong	Hong Kong Stock Exchange	5		~	~		~	
Indonesia	Indonesia Stock Exchange	10 Equity, Funds 5 Options, Futures, Warrants	~		\checkmark	~	\checkmark	\checkmark
Israel	Tel Aviv Stock Exchange	3	\checkmark	~	\checkmark		\checkmark	\checkmark
Italy	TLX	5	\checkmark	\checkmark				\checkmark
Korea (south)	All Korea Exchanges	10	~	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Lebanon	Beruit Stock Exchange	5	\checkmark	\checkmark				
Malaysia	Bursa Malaysia Securities Exchange	5	~					\checkmark
Malaysia	Bursa Malaysia Derivatives Exchange	5			\checkmark	~	~	
Norway*	Oslo Stock Exchange	5	~	✓	\checkmark			\checkmark
Phillippines	Philippines Stock Exchange	3	~	~				\checkmark
Serbia	Belgrade Stock Exchange	10 Equity 3 Fixed Income	~					
Slovakia	Bratislava Stock Exchange	3	~					
Spain	Barcelona Stock Exchange Mercado Continuo	3		✓ ✓				~
Spain	Espanol	5	÷					÷

Country	Exchange	Levels	Equity	Fixed Income	Options	Stock Futures	Other Futures	Warrants and Funds
Spain	MEFF REnta Fija	3		\checkmark				
Sweden	Nordic Growth Market	5	~	~				\checkmark
Taiwan	Taiwan Futures Exchange	5			\checkmark	\checkmark	\checkmark	
Thailand	Stock Exchange of Thailand	3	~					\checkmark
Thailand	Bond Electronic Exchange (BEX)	3		\checkmark				
Thailand	Thailand Futures Exchange	3					\checkmark	
Thailand	Agricaultural Exchange of Thailand	3					\checkmark	\checkmark
United Kingdom	Chi-X	10	\checkmark					\checkmark
United Kingdom	BATS	10	\checkmark					

Level 1 and Level 2 data bundled into single RIC continued...

*No longer applicable once migrated to LSE Data Model (Level 2 will be a separate RIC with "d" suffix)