Creation of Metadata Records

for WMO Core Metadata Profile

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This talk

- Ways to create metadata

- What's so difficult?
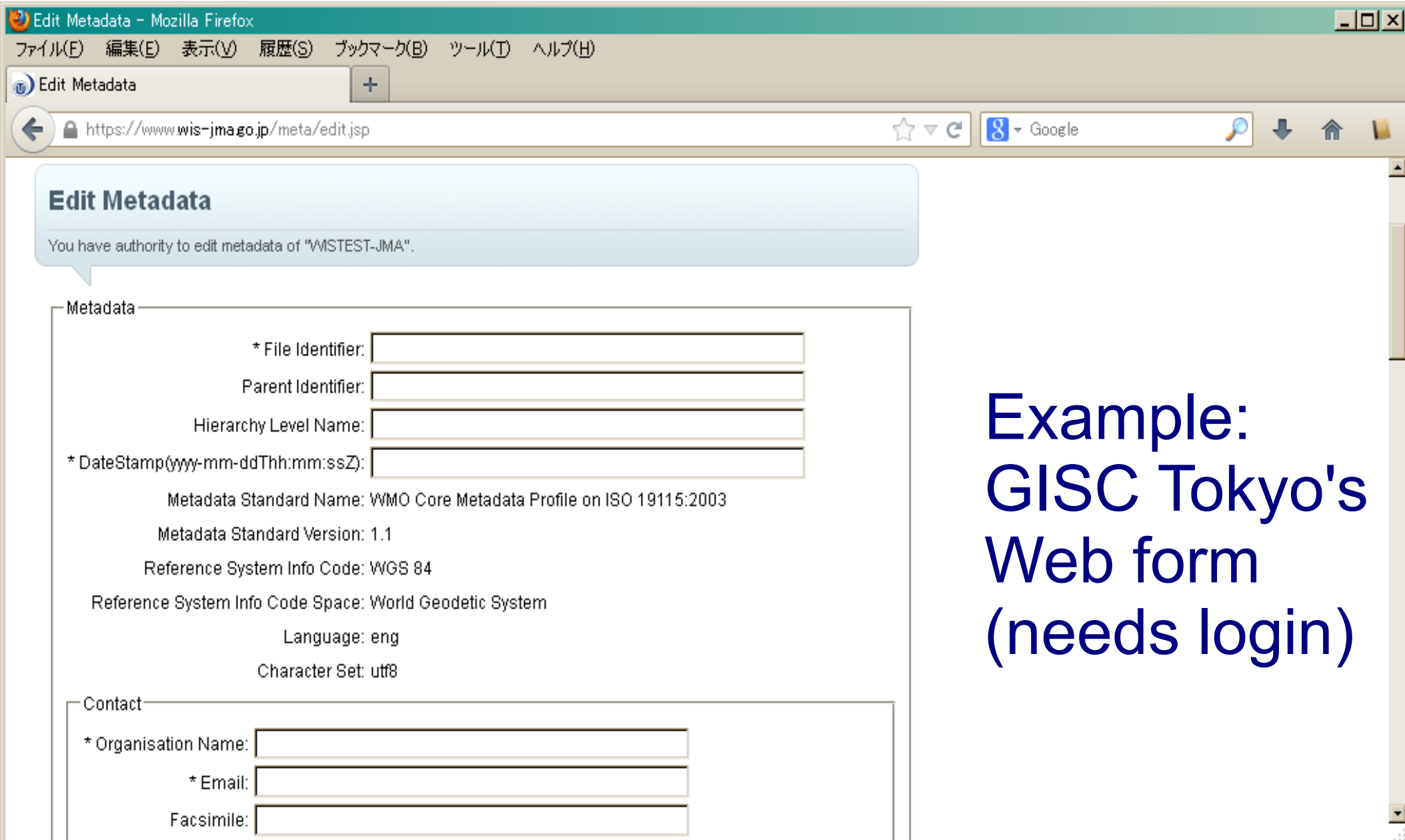
- One approach: Excel tool

Ways to Create Metadata

1) Type all XML tags

2) Web-based form

3) Desktop application

- Each has strength and weakness
- WIS doesn't force specific way and tells each GISC to assist centres appropriately

1) Type all XML tags

- **I'm not joking**
  - At least GISC Beijing supported (I respect that !)
- Strength
  - You can do everything
  - Future changes never break app
- Weakness
  - Learn about XML structure

2) Web-based form

Example:
GISC Tokyo's
Web form
(needs login)

2) Web-based form

- All GISCs support it

- Strength
  - GISC can make simplified form
  - Press "submit" button, its already sent to GISC

- Weakness
  - Good internet needed
  - Simplified form cannot cover everything
  - Changes in WIS metadata standards

3) Desktop application

Example: GISC Tokyo's Excel form

3) Desktop application

- Simplified forms run on local computer
  - Result is local files
  - You can email / FTP / whatever to your GISC
- Strength
  - Don't need reliable internet
  - You have full control on files
  - Forms can be more flexible
- Weakness
  - Platform dependency
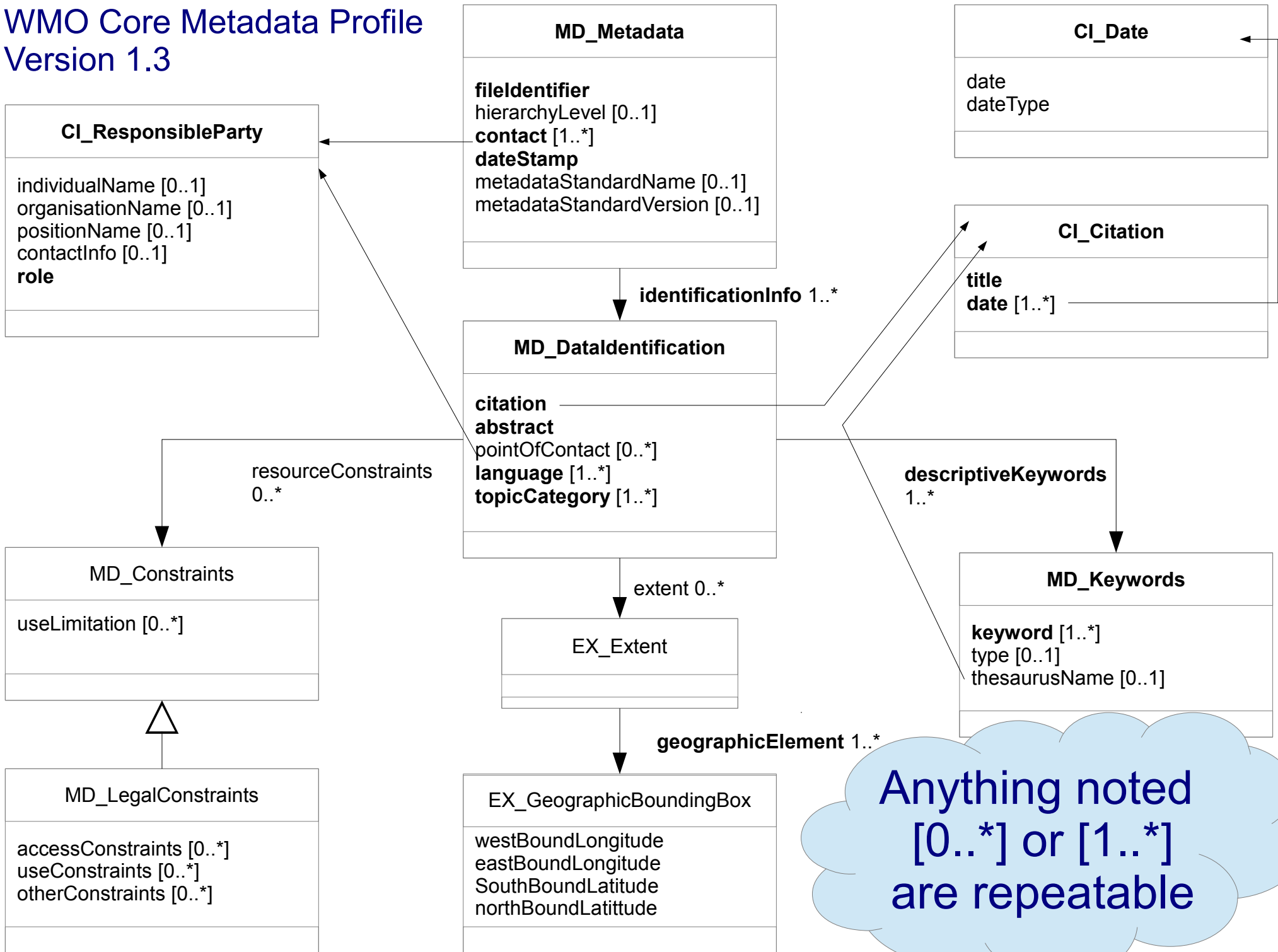
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What's so difficult?

What's *simplification*?

- Drop rarely used parts

- Give pull-down list

  – Easier

- Repeatable parts

  – Static web form can't do that too much

    - JavaScript is needed

  – Single Excel row can't either.

WMO Core Metadata Profile
Version 1.3

MD_Metadata

fileIdentifier
hierarchyLevel [0..1]
contact [1..*]
dateStamp
metadataStandardName [0..1]
metadataStandardVersion [0..1]

CI_Date

date
dateType

CI_ResponsibleParty

individualName [0..1]
organisationName [0..1]
positionName [0..1]
contactInfo [0..1]
role

identificationInfo 1..*

CI_Citation

title
date [1..*]

MD_DataIdentification

citation
abstract
pointOfContact [0..*]
language [1..*]
topicCategory [1..*]

resourceConstraints
0..*

descriptiveKeywords
1..*

MD_Constraints

useLimitation [0..*]

extent 0..*

MD_Keywords

keyword [1..*]
type [0..1]
thesaurusName [0..1]

EX_Extent

MD_LegalConstraints

accessConstraints [0..*]
useConstraints [0..*]
otherConstraints [0..*]

geographicElement 1..*

EX_GeographicBoundingBox

westBoundLongitude
eastBoundLongitude
SouthBoundLatitude
northBoundLatittude

Anything noted
[0..*] or [1..*]
are repeatable

Excel-based metadata generator

An instance of desktop application,
part of RA-II/V WIS App Pilot Project

(1) type contact info

(2) type bulletin info

(3) type station info

Microsoft Excel - rjtd-wismd-tool [読み取り専用]

ファイル(F)　編集(E)　表示(V)　挿入(I)　書式(O)　ツール(T)　データ(D)　ウィンドウ(W)　ヘルプ(H)　質問を入力してください

100%　Calibri　11　B

A3　fx　41151

	A	B	C	D	E	F	G	H
1	IndexNbr	IndexSubl	CountryArea	StationName	Latitude	Longitude	Hp	HpFlag
2380	91902	0	SOUTHERN LINE ISLANDS	MALDEN ISLAND (NORPAX)	5 57S	155 00S	2	
2381	91903	0	SOUTHERN LINE ISLANDS	MALDEN ISLAND (UNIV. OF HAWAII)	5 57S	155 00S	2	
2382	97385	0	TIMOR-LESTE	OE-CUSSIE	10 48S	124 22E	5	
2383	97388	0	TIMOR-LESTE	DILLI/COMORO	9 27S	126 34E	0	
2384	97389	0	TIMOR-LESTE	COMORO	9 27S	125 31E	0	
2385	97390	0	TIMOR-LESTE	DILLI/DILLI AIRPORT	9 26S	125 34E	6	
2386	97394	0	TIMOR-LESTE	VIQUEQUE	9 08S	126 22E	47	
2387	97395	0	TIMOR-LESTE	BAU CAU	9 30S	126 24E	522	
2388	91720	0	TOKELAU (AND SWAINS IS.)	ATAFU	9 28S	173 29S	3	
2389	91723	0	TOKELAU (AND SWAINS IS.)	NUKUNONU AWS	10 49S	172 07S	3	#
2390	91724	0	TOKELAU (AND SWAINS IS.)	NUKUNONO	10 48S	172 05S	3	
2391	91727	0	TOKELAU (AND SWAINS IS.)	FENUAFALA/FAKAOFO	10 37S	172 44S	4	
2392	91772	0	TONGA	NIUAFOOU	16 26S	176 23S	61	
2393	91776	0	TONGA	KEPPEL/MATA'AHO AIRPORT	16 03S	174 14S	3	
2394	91779	0	TONGA	LUPEPAU'U	19 25S	174 02S	70	
2395	91780	0	TONGA	VAVAU	19 21S	174 01S	10	
2396	91784	0	TONGA	HAAPAI	20 12S	175 39S	3	
2397	91785	0	TONGA	HA'AFEVA	20 03S	175 18S	0	
2398	91786	0	TONGA	NOMUKA	21 45S	175 12S	36	

(3') in case of METAR

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C58　　　fx　PARAPARAUMU AERODROME

	A	B	C	D	E	F	G	H	I
1	CCCC	IndexNbr	StationName	CountryArea	Latitude	Longitude	Ha		
5	AYMD	94014	Madang	Papua New G	6 47S	145 47E	3		
6	AYMO		Manus Island/Momote	Papua New G	3 56S	147 25E	4		
7	AYPY	94035	Moresby	Papua New G	10 34S	147 13E	38		
8	AYWK	94004	Wewak	Papua New G	4 26S	143 38E	6		
9	KMKK		Kaunakakai, Molokai Airport, HI	United States	21 09N	158 54S	138		
10	KQIR		Al Udeid	Qatar	25 07N	51 18E	42		
11	KQTA		ATSUGI, JAPAN NAVAL AIR	JAPAN	35 27N	139 27E	62		
12	NCRG	91843	RAROTONGA	COOK ISLAND	22 48S	160 11S	7		
13	NFFN	91680	NADI AIRPORT	FIJI	18 15S	177 27E	13		
14	NFNA	91683	NAUSORI	FIJI	19 57S	178 34E	5		
15	NFNK	91691	LAKEBA	FIJI	19 46S	179 12S	2		
16	NFNR	91650	ROTUMA	FIJI	13 30S	177 03E	26		
17	NFTF	91792	FUA'AMOTU	TONGA	22 46S	176 51S	38		
18	NFTL	91784	HAAPAI	TONGA	20 12S	175 39S	2		
19	NGBR	91623	BERU	KIRIBATI	2 39S	176 00E	2		
20	NGFO	91631	NANUMEA	TUVALU	6 20S	176 08E	2		
21	NGFU	91643	FUNAFUTI	TUVALU	9 29S	179 13E	1		
22	NGTA	91610	TARAWA	KIRIBATI	1 21N	172 55E	2		
23	NGTR	91629	ARORAE	KIRIBATI	3 20S	176 50E	4		

(4) press "export"

Why multiple sheets?

- One GTS bulletin (TTAAii CCCC) may have

    - Up to three contact points

        - RTH

        - Originating centre

        - Metadata contact

    - Many stations of two types

        - WMO station identifier (ex. 47622)

        - ICAO location identifier (ex. RJAA)

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How it works
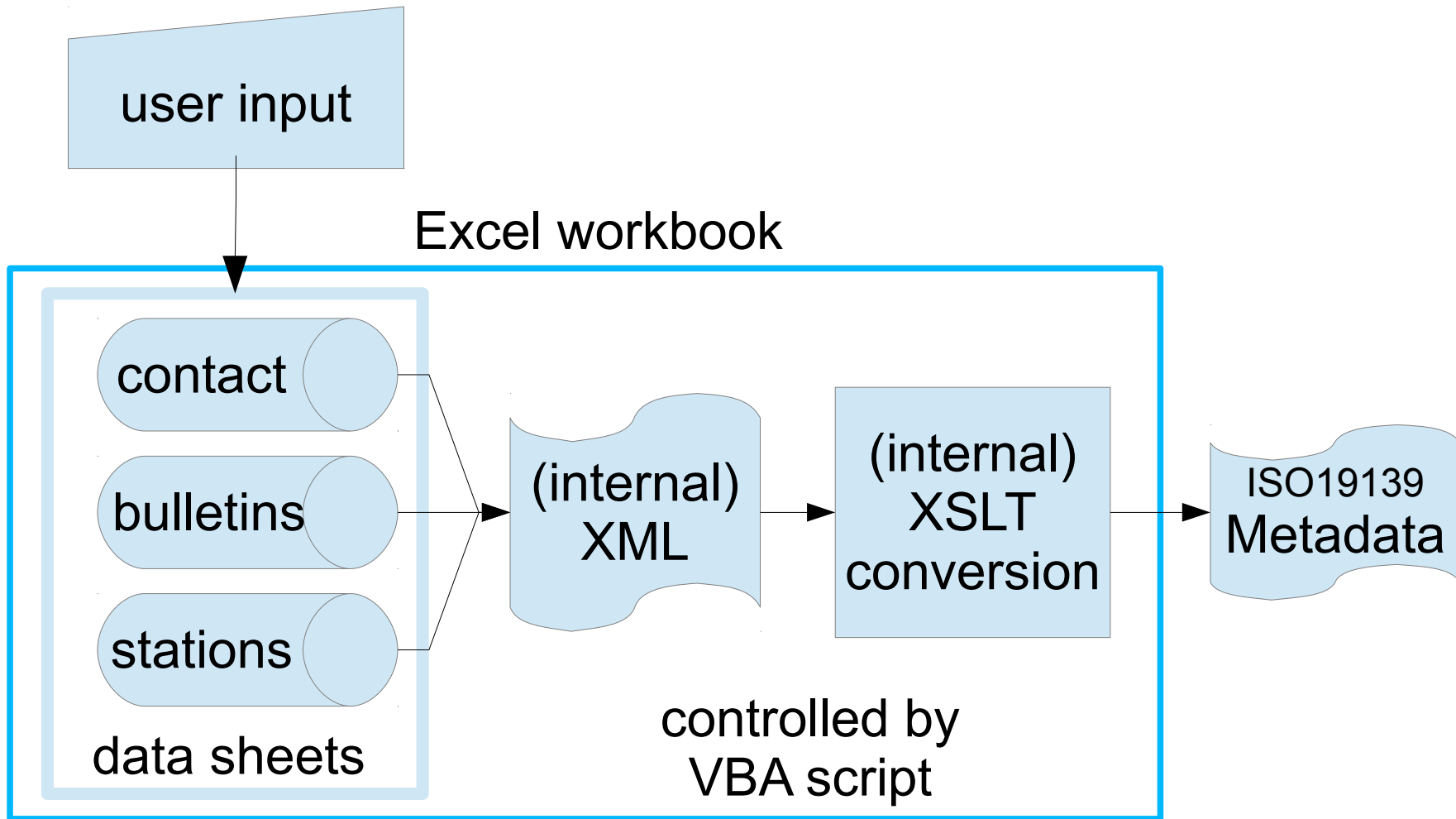
Summary

- Three ways to creatae metadata
    - Each has strength and weakness
- Primary difficulty is repeatable elements
- Excel-based metadata generator
    - Part of RA-II/V WIS App Pilot Project