Proposal for Refactoring the Precision Coding Structure for the IATI <location> Element

# Introduction

The IATI Secretariat has asked the group represented by the OAP, CIDA, and Development Gateway to develop a new proposal for the <location> element under the 1.02 decimal upgrade of the IATI standard. This proposal should be based on the results of the August 2012 discussions in Ottawa, but should add in the flexibility of going beyond just ADM1 and ADM2 regions to allow ADM1-n region specification using multiple different gazeteers. To do this, some refactoring of the precision code system will be necessary, as the current precision code list does not allow for any administrative region smaller than an ADM2. This document outlines a first proposal for that refactoring.

#  Proposal

Instead of one “precision code”, it is recommended that each <location> element have two codes which determine its overall accuracy: a “precision code” and a “feature class”. Each of the precision codes contained in the Ottawa standard will be expressed as some combination of a new *precision code* and *feature class*. The proposals for precision codes and feature classes are as follows:

**Precision Codes**

* 1. **The Location is Exact.** The location specified is the best possible specification for this segment of the activity.
	2. **The Location is Approximate.** Ideally the location for this segment of the activity would be specified in more detail, however sufficient information is not available.

**Feature Classes**

1. **Structure.** The location is a specific physical structure like a building, a road, etc.
2. **Populated Place.** The location is a populated area best represented by a point, such as a village, city, etc.
3. **Administrative Division.** The location is an administrative division, such as an ADM1 or an ADM5
4. **Can’t be Specified.** No specific location can be specified for the activity (e.g. advocacy, etc.)

# Reclassification Between Ottawa Precision Codes and New Codes

The goal of this refactoring was to allow more flexibility while also ensuring that any code from the Ottawa Precision Codes could still be expressed distinctly as one of the new set of precision codes. This section shows the reclassification between the old and new codes.

**Old Precision Codes**

* 1. **The coordinates correspond to an exact location such as a university or a hospital, or the street address is known.**
	2. **The coordinates corresponds to an exact populated place, where the exact street address is unavailable. (Note: This category is identical to how the World Bank methodology previously identified precision 1).**
1. The location is mentioned in the source as being “near”, in the “area” of, or up to 25km away from an exact location. The coordinates refer to that adjacent, exact, location.
2. The location is, or lies in, a second order administrative division (ADM2), such as a district, municipality, or commune.

4.1 The location is an entire first order administrative division (ADM1), such as a province, state or governorate.

4.2 The location is within a first order administrative division (ADM1), such as a province, state or governorate, but the location within the ADM1 is unknown.

5 The location can only be related to estimated coordinates, such as when a location lies between populated places; along rivers, roads, and borders; more than 25 km away from a specific location; or when sources refer to parts of a country greater than ADM1 (e.g. “northern Uganda”)

6 The location can only be specified to the national level (or dependent political entity that is geographically analogous to a country).

7 The country coordinates are entered to reflect that sub-country information is unavailable (may be national or sub-national).

8.1 The location represents funding to a government agency

8.2 The location represents funding to a government agency, but this is not the only location for the project.

**8.3 The location represents funding to an NGO or CSO or private sector entity headquarters.**

**9 The location is representative of funding to a regional (supra-national) program.**

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|  |  |  | **Feature Class Type** |
|  |  | **Class 1: Structure** | **Class 2: Populated Place** | **Class 3: Administrative Division** | **Class 6: Can’t be Specified** |
| **Precision** | **Precision 1: Exact** | **1.1** | **1.2** | **3****4.1****6****(8.1, 8.2, 8.3)** |  |
| **Precision 2: Approximate** | **2** | **5** | **4.2****7****(8.1, 8.2, 8.3)** | **9** |

Figure 1 - The reclassification between the old and new coding systems. The old codes corresponding to each combination of Precision and Feature Class are shown in the boxes.

# Overlapping Codes

In Figure 1 above, some of the old precision codes are in the same category, despite having been distinct under the previous system (e.g. both 4.2 and 7 are considered to be “Class 3, Precision 2”). However, the precision of locations specified according to each of these overlapping codes will still be distinct. This is explained in the following sections.

## Codes: 3, 4.1, and 6

The old codes of 3, 4.1, and 6 are now contained in the type “**Class 3/Precision 1**” (an administrative area that represents an exact specification for an activity segment). However, the distinction between 3, 4.1, and 6 will still be preserved implicitly, because they represent different administrative levels. E.g. 3 is always an ADM2, 4.1 is always an ADM1, 6 is always a country, etc.

## Codes: 4.2 and 7

The old codes of 4.2 and 7 are now contained in the type “**Class 3/Precision 1**” (an administrative area that represents an approximate specification for an activity segment). The distinction between 4.2 and 7 is still preserved, however, because 4.2 always represents an ADM1 while 7 always represents a country.

## Old Codes: 8.1, 8.2, and 8.3

The old codes of 8.1, 8.2, and 8.3 are now being replaced with the appropriate specification based on the new feature class and precision codes. Some of the “channel of delivery” information will be lost from the specific <location> elements, but this was considered appropriate given that this information is already available in the IATI standard through the <aid-type>, <participating-org>, <finance-type>, and <tied-status> elements.

# Other Issues

## “Precision”

The word “Precision”, as it is being used in the above context, is no longer completely accurate. The difference between precision 1 and precision 2 does not relate to the specificity of an exact location, but rather the quality of the information and process underlying that location’s coding.

For example, imagine a capacity building support project to send the District Education Manager in an ADM2 District on a skills building course. That project is presumably meant to support the quality of education support in the entire district. However, is will **never** be possible to know which specific sub-ADM2 locations are impacted by the director’s increased capacity. Thus the only <location> element which should be provided should be for the ADM2 district, coded Class 3, Precision 1. The <location> is given Precision 1 because it is the best possible specification for that activity - no realistically attainable amount of additional information could allow the publisher to code the activity’s locations with more specificity.

As a comparative example, imagine an activity to construct two new schools in the same ADM2 district. Ideally the activity would have two <location> elements - one for each school. However, if the specific locations of the schools were unavailable, the publisher could instead provide a <location> element for the ADM2 district, coded Class 3 Precision 2. The reason the <location> would be coded Precision 2 is because it would be very reasonable for a publisher to supply more specific information, but in this case, for whatever reason, that information isn’t available.

Thus, in effect, the “precision” measure is actually an indicative measure of how accurate and complete the geographic information associated with an activity is, not how “precise” an individual location is in the traditional sense. It would therefore be advisable to find a suitable word to use in the place of “precision” which has closer connotations to what is actually being described.

Note: all of this is inherited from earlier distinctions in the precision code system, such as:

6. The location can only be specified to the national level (or dependent political entity that is geographically analogous to a country).

7. The country coordinates are entered to reflect that sub-country information is unavailable (may be national or sub-national).