

Comment template for theme 'AD'

	1	2	-3	4	5	-6	-7
<u>Id[1]</u>	Name	Chapter, section or clause no./	Paragraph/	Type of comment[4]	Comment (justification for change)	Proposed change[5]	WG A observations
		Subclause No./	Figure/Table/Note[3]				on each comment submitted
		Annex[2]					
<u>1</u>	Stat FI	1		G	Location of address points may be crucial from the point of view of geospatial statistics. Address points can be the basis of an entire geospatial statistical system or they can be used as auxiliary data to enrich statistical data by location information of address points. Thus addresses may represent location in a point-based statistical system (in a point-based foundation) - the reference point may also be based on another location point, such as centroids of buildings or real estates. Thus the statistical location is fundamentally based on one of these options (or some other not mentioned here), they may together or partly together be the basis of geospatial statistical production and be needed while geospatial statistics are produced.	Addresses may represent a location reference in a point-based foundation of geospatial statistics (*). UN GGIM Europe WG B recommends... (*) A Point-based Foundation for Statistics – Final report from the GEOSTAT 2 project (main report) Link to: http://www.efgs.info/wp-content/uploads/2017/03/GEOSTAT2ReportMain.pdf	The Executive summary should stay a summary. Importance of AD for census has been added in the summary. Whole proposed text has been added to the chapter 3.2 about Use cases.
<u>2</u>	DE	1	4th paragraph	G	Specific requirements are missing. "SDGs require knowledge of location" Required actuality, precision of coordinates, concrete usecases are missing.	Add missing requirements	NA It would be too much detail for an Executive Summary
<u>3</u>	IGN FR	1	1st paragraph	E	The part that is generic to all themes should be written in grey rather than in black => highlight what is specific to theme AD	Change colour of first paragraphs.	Accepted
<u>4</u>	Geostat	1 and/or 3		G	Could there be a reference in the introduction to the GSGF and/or the ESGF currently under development in the GEOSTAT 3 project? The availability of accurate address data is one of the fundamental features of the framework (under principle 1). Such a reference could even stronger underpin the urgency of harmonised address registers in all Member States.		Accepted GSGF has been mentioned in 3.2.

<u>5</u>	NL	2.3.3, 3.1, 4.5.1		G	"This document contains recommendations that are not legally binding", yet at the same time "core data, unlike [voidable] INSPIRE data, is not constrained to what already exists" and "compliant addresses should be available for all buildings [...] on the basis of continuous update" with a "completeness of 95% or more", which requires a significant and expensive data collection effort.	The ambitions of the document should be in balance with its status. Also, minor semantic differences should not result in a major and costly data collection effort.	Disagree - as long as the status of the document is clear, it can make strong recommendations
<u>6</u>	IGN FR	2.4		T	Some acronyms are missing (e.g. OGC, ISA)	Add missing acronyms.	Accepted
<u>7</u>	Eurostat	2.4	Abbreviations	E	add INSPIRE and EC acronyms as used in the text	add two new rows:INSPIRE - Infrastructure for Spatial Information in the European Community and EC:European Commission	Accepted
<u>8</u>	DE	3.1	Header	E	3.1 is rather a definition of addresses than a general scope. Rename chapter 3.1	3.1 General scope of the definition of address data	This is a template heading so propose to leave unchanged
<u>9</u>	DE	3.1	1st paragraph	E	Complete the reference.	Definition: Location of properties based on address identifiers, usually by road name, house number, postal code [INSPIRE Directive 2007/2/EC, Annex I]	Accepted
<u>10</u>	NO	3.1		E	Flats and apartments are core topics in UNECE recommendations for 2020 round of Population and housing censuses : http://www.unece.org/fileadmin/DAM/stats/publications/2015/ECECES41_EN.pdf Core topics in previous UN documents should be kept avoiding confusion. The trend is furthermore to base administration and statistical production upon registers. These registers by necessity include addresses to dwellings. (Chapter 3.2. also refer to Address as source data for censuses.)	Delete NOTE 2	Case of building units have been considered under chapter 4.5. From the UNECE recommendations, it is not so clear that addresses of building units are required. The document mentions unique identification of building units ; it might be the cadastral reference or something else (e.g. Internet access code mentioned in the document).
<u>11</u>	IGN FR	3.1	Description	T	"bar" looks a very specific example whereas more generic examples are missing (e.g. block of flats).	Replace "bar" by "block of flats"	Accepted
<u>12</u>	IGN FR	3.1	Note 2	T	Note 2 (about address at apartment level) may look inconsistent with good practice 5	Moderate the note; e.g; addresses for flats and apartments are generally not required as core data	Case of building units have been considered under chapter 4.5.
<u>13</u>	NL	3.1	Definition	T	A property must be defined as a unit with multiple properties. One of the properties of the unit is having one of more addresses with a unique ID attached to it (f.i. at the front and at the back of a building). Another property of an unit is to belong to a building along with other units belonging to the same building. An unit must have its own entrance and the location of a the unit may be defined by geometry. This solves the problem of changing of address in time or multiple addresses attached to one unit. The address is just a way to find the unit.	An address is uniquely defined by an identifier and address components, usually road name, house number, postal code.	Core data is mainly about geographic data. The INSPIRE definition looks better than the proposal as it mentions the location.

<u>14</u>	UK (OS)	3.1	Description	G	In the UK flats and apartments have individual addresses that are considered to be 'core'. From the SDG angle their absence would affect the use of addresses as a proxy for population density.	Preference would be for flat and apartment addresses to be core.	Case of building units have been considered under chapter 4.5.
<u>15</u>	NL	3.1, 3.2, 4.4		G	Why are high-density buildings such as flats and apartments deemed to be of "lesser interest for SDG purposes" and "not required" or only identified by their building address when there are also building unit addresses when "addresses also act as a proxy for the density of population or buildings"?	Omit note 2 from 3.1 and qualify case a) in 4.4 as a last-resort option	Case of building units has been considered under chapter 4.5.
<u>16</u>	NL	3.1, 4.4	3.1, 4.3	G	Why do agricultural buildings "have minor importance for the SDGs", when "core address data should also encompass isolated buildings and buildings in remote areas"?	Omit agricultural buildings from 3.1?	Only with buildings for the shelter of humans are considered as core. However, agricultural buildings will be removed from the list of exceptions.
<u>17</u>	Eurostat	3.1	Note 1	G	agricultural buildings are relevant for many statistics	remove agriculture buildings from the list of examples and add it to the description paragraph earlier	Only with buildings for the shelter of humans are considered as core. However, agricultural buildings will be removed from the list of exceptions.
<u>18</u>	Eurostat	3.1	paragraph 5	E	add dot at end	Add full stop	Accepted
<u>19</u>	DE	3.2	3rd paragraph	E	Delete the hyphen	The analysis carried out by WG A use case ...	Accepted (consistency)
<u>20</u>	DE	3.2	4th paragraph	E	Add a hyphen	... recommended by UN-GGIM : Europe WG B , and is required ...	Accepted
<u>21</u>	IGN FR	3.2		E	An illustration would make the document more attractive.	Add illustration (e.g. use case map or the use case images)	Accepted
<u>22</u>	Eurostat	3.2	1st para	E	Since the current scope is official statistics and SDG , the example with the marketing could be perceived wrongly.	Find another example for the value of address data for SDG purposes.	NA There is also at least an SDG about economy but this related SDG will be mentioned (SDG 8).
<u>23</u>	IGN FR	4.1	Good practice 2	T	"Examples from the INSPIRE code list are: building, entrance, parcel, postal delivery point, postal descriptor and administrative unit"	To be rephrased, e.g. "Examples from the INSPIRE code list include: building, entrance, parcel, postal delivery point, postal descriptor and administrative unit"	Accepted
<u>24</u>	Eurostat	4.1	Note 1	G	House number missing	I suggest to add house number as component	For INSPIRE, house number is a locator and not an address component.
<u>25</u>	Eurostat	4.1.	Good Practice 2	?	I am not sure I understand the purpose of this good practice an example could help.	Add example please.	Accepted (example required)
<u>26</u>	IGN FR	4.1.1		T	Might be worthwhile to add some notes, as for other themes, to explain and/or support these recommendations.	Add some notes (as for other themes)	Accepted

<u>27</u>	Eurostat	4.1.1.	Good Practice 3	?	Do INSPIRE versioning provisions in the data model make possible that the sequence of addresses can be monitored. Often a street changes the name but nothing else changes. Can we understand this connection with the current INSPIRE provisions?	Explain that this use case is accepted and covered by INSPIRE, make it a good practice if not yet possible.	In case of a simple data model (features + direct attributes), the INSPIRE versioning mechanisms enable users to get incremental updates by simple requests on the life-cycle attributes. In case of theme AD, with a complex model (address components as feature types), capturing the version id and the life-cycle attributes is a preliminary step but more complex user requests will be required to get exploitable incremental updates.
<u>28</u>	Geostat	4.1.1	Core recommendation 2	G	I think good practice 3 is very important from the statistical community perspective. Is it possible to integrate part of it in the core recommendation 2? At least it makes sense that from the point in time an address register is set up, all address objects need to be retained. The obsolete address locations are really important for us.		Importance for the statistical community has been added as rationale for this good practice.
<u>29</u>	IGN FR	4.4	Core recommendation 4	E	The examples ("This could be a house (whether or not attached to its neighbours), office, factory, retail unit, leisure centre, bar or place of worship." might be better in a note	Move the examples to a NOTE?	Accepted
<u>30</u>	IGN FR	4.4	Good practice 5	T	Should be a core recommendation; if not, addresses of buildings- block of flats might be missing in some countries.	Move to core recommendation	A
<u>31</u>	NO	4.4	Core Recommendation 4	Q	The basic unit should be compliant with UNECE recommendations for censuses and their core topics. The basic unit of addressing should be dwelling for residential building. Definitions should not be part of the recommendations. Where do these definitions of building come from? Why not use UN Classification of Types of Construction? Why not use UNECE recommendations on censuses?	New text: "Core recommendation 4. The basic unit of addressing is a building, or part of a building, and for residential buildings the basic unit is dwellings." Makes notes defining or referring to definitions of building and dwelling.	See comment 10. We have tried to clarify this topic: - there may be Addresses at building units - but capturing their individual location is of limited value WG A focus on the geographic addresses.
<u>32</u>	Eurostat	4.4	4	E	singular instead of plural	change 'building units has' to building units have'	Accepted
<u>33</u>	Eurostat	4.4.	Bullet points	E	illustrations could help to understand the differences.	Add illustrations e.g. from INSPIRE technical guidelines	Accepted
<u>34</u>	Eurostat	4.4	Note 1	E	Note1 looks unfinished - reword	Reword ' Good practice 5 ONLY addresses use case C above, not use case A and B '. Additionally add Case A, Case B and Case C to the previous paragraph instead of a) b) and c)	Accepted
<u>35</u>	Eurostat	4.4.	Note 1	E	I suggest to have a good practice for a, b, and c of the bullet points on multi-unit buildings	Add good practices for a, b, c	Accepted
<u>36</u>	IGN FR	4.5	4,5		We expect other things in "Quality": coordinates, metadata -> in fact it comes later	Rename the chapter "Base Quality" in precisising it treats of completeness, precision, coherence	Non accepted

<u>37</u>	DE	4.5.1	Core recommendation 5	G	I think the list is not exhaustive.	Compliant addresses should be available for all buildings meeting the criteria of the description from part 3.1, on the basis of continuous update once/twice a year.	'continuous update' means whenever new data are available, not periodic updated. Clarification has been added.
<u>38</u>	DE	4.5.1	Core recommendation 5	E	Use part instead of §.		Accepted
<u>39</u>	DE	4.5.1	Note	G	How to quantify completeness?		In the document, completeness is the proportion of AD present in the database compared to the AD present in the real world.
<u>40</u>	NO	4.5.1	Core Recommendation 5	Q	Ibid. Why not include dwellings? 95% completeness is way to poor quality. Given today's opportunities with detailed satellite and lidar data, this should be low hanging fruits.	Include dwellings in recommendation and raise completeness to 98-99 per cent.	95% is very minimum requirement. Completeness to 98% will be mentioned as more ambitious target.
<u>41</u>	DE	4.5.2	Core recommendation 6	E	Delete the hyphen	Coordinates of an address should be accurate to within 5 metres of the true position of the building centroid or entrance, where possible.	Accepted
<u>42</u>	IGN FR	4.5.2	4.5.2		The rule of 5m precision is too hard to ensure and it may depend on the considered area.	Remove this rule or put it in good practice	The rule is less demanding (10 m).
<u>43</u>	IGN FR	4.5.2	4.5.2		It deals with data capture, more than base quality, no?	Displace the paragraph in Data Capture	NA It is dealing both with data capture and with quality.
<u>44</u>	Eurostat	4.5.2	2	T	Add NOTE on metadata	add: NOTE: Metadata for each location need to report which method (building centroid, entrance) is used. The method of capture the location should also be documented (e.g. geodesy, GPS handheld, interpolation)	Location type (building centroid or entrance point) is already in the data model (as GP 2). Data capture method may vary according features. It is not considered as core information.
<u>45</u>	Eurostat	4.5.2	2	T	If a central geocoding infrastructure is used, the third dimension needs to be taken into account (experience from several Memberstates) to identify single flats at the third floor	add sentence to Note: The central register should preferably include third dimension information (see 5.1.2)	NA 3D addresses are not considered as priority data but they may have interest in future => this will be added to chapter 6
<u>46</u>	IGN FR	4.5.3	4.5.3		The rule of semantic coherence between administrative entities is impossible in practice: in France, DGFIP, IGN or La Poste write differently roads (upper case/lower case/abbreviations/letters...). The question is: how to do that?	Describe the difficulties in the note	Disagree - as long as the status of the document is clear, it can make strong recommendations

<u>47</u>	IGN FR	4.5.3		T	I wonder if we should add some more explicit recommendation about "reference AD data". For instance, I find very relevant some of the recommendations of the ESGF document, especially 2.2.6 (Use point-of-entry validation in collection of administrative or statistical data)	To be added to our deliverable?	Use point-of-entry validation has been added as potential solution to ensure common AD semantics.
<u>48</u>	NL	4	4.5.3	G	It should be noted that address standardization in general and street name standardization in particular is important to ensure that address components are recorded in a uniform and consistent way	Add to Good practice 7 and NOTE that address registration should preferable be standardized and uniform, with respect to spelling, use of spaces, diacritics, capital letters, address additions, etc.	Accepted
<u>49</u>	Eurostat	4.5.3	NOTE	G	This is a key requirement and should therefore be a Core Recommendation	Core Recommendation to have a single uniform national address encoding service with check-on-entry feature available as web service to all public authorities in charge of encoding addresses.	NA This deliverable is about Recommendation for <u>data content</u> . Encoding services are not main focus and so, not good topic for Core recommendation.
<u>50</u>	DE	5.1.1	Good practice 8	G/E	To ensure interoperability it's not sufficient to recommend "a CRS based on ETRS 89". At least the EPSG-Code should be stated mandatory. Good practice 8 should be a recommendation. Regarding european overseas territories and having a world wide scope in mind it could be better to use an ITRS-based CRS	Core Recommendation xx Core data should be stored and managed in a CRS based on datum ETRS89 (<i>ITRS..</i>) in areas within its geographical scope, either using geographic or projected coordinates. The EPSG-Code of the CRS should be stated.	NA National CRS is better for national use (that is main purpose of core data). Coordinate transformation to global CRS may be done easily if need for global use EPSG code: WG A is recommending to deliver AD data under INSPIRE rules, these rules include the CRS documentation.
<u>51</u>	DE	5.1.1	Note 1	E	Work uniformly within the document and write a capital letter at the beginning of the sentence.	NOTE 1: Geographical scope of ETRS-89 excludes ...	Accepted
<u>52</u>	DE	5.1.1	Note 2	E	Work uniformly within the document and write a capital letter at the beginning of the sentence.	NOTE 2: Storing and managing data	Accepted
<u>53</u>	NO	5.1.2			3D should be part of unique identifier for dwellings	Change text from "may be represented" to "shall be represented"	NA Real-world addresses on building units are not existing in all countries. See comment 45
<u>54</u>	DE	5.2	NOTE	E	Work uniformly within the document and write a capital letter at the beginning of the sentence.	NOTE: This is a legal obligation for ...	Accepted
<u>55</u>	DE	5.2	Good Practice 9	G	Add the Implementing Rules, because only these documents are legal obligations for the Member states belonging to the European Union (see the NOTE below the recommendation). Good practice 9 should be an recommendation.	Core Recommendation xx Core data should be documented by metadata for discovery and evaluation, as stated in the INSPIRE Implementing Rules for metadata and for interoperability considering their corresponding Technical Guidelines.	Clarification has been added: - we recommend TG for practical reasons - but we recognise that only IR is legally binding. we mention Technical Guidelines in the GP and we say in a NOTE that they are legal obligation whereas only IR are binding.

<u>56</u>	DE	5.3	Good practice 10	G	Add the Implementing Rules, because only these documents are legal obligations for the Member states belonging to the European Union (see the NOTE below the recommendation). Good Practice 10 should be a recommendation.	Core Recommendation xx Core data should be made available according to the INSPIRE Implementing Rules for metadata, for interoperability and for services considering their corresponding Technical Guidelines	See observation on Comment 55.
<u>57</u>	DE	5.3	NOTE	E	Work uniformly within the document and write a capital letter at the beginning of the sentence.	NOTE: This is a legal obligation for ...	Accepted
<u>58</u>	DE	5.3	Good practice 11	G	To make it useful and consistent, add the attribute "address semantics" to a data model and add a definition.		A Added in Annex A.
<u>59</u>	IGN FR	5.3	Good practice 11		Helpful for who? Postal delivery?	Precise helpful	A
<u>60</u>	Geostat	5.3	Good practice 11	G	I don't understand this. Isn't the address semantics in the form of a simple text really part of the locator logics mentioned in core recommendation 1? Eg Street namn + street number		Content of address semantic has been added
<u>61</u>	Eurostat	5.3	Core Recommendation	G	Address data needs to be made available as web service.	Add core recommendation that in each Member State there needs to be an authority that provides a central, uniform address encoding service.	NA This deliverable is about Recommendation for data content. Encoding services are not main focus and so, not good topic for Core recommendation.
<u>62</u>	NO	6.1.1		Q	Several countries have about 50 years' experience with digital registers for use in censuses and governance. Handling historical addresses is not only achievable, it has been done for several decades, and is increasingly done when digitizing old paper archives. Machine learning and crowd sourcing is making this less and less expensive. Old cadastres, church books, censuses and more are being digitized on daily in a lot of countries. Why is there description of status quo here?	Delete text and add best practice on historical addresses.	Norway looks quite advanced but in many countries, it is neither considered as a priority nor as easily achievable. However, we might rephrase the text in "considerations for future", mentioning it is already done in some countries.
<u>63</u>	IGN FR	6.1.3	6.1.3		For me, persistent identifier is on core of the addresses. It should be emphasised in a recommendation or good practice. It is not relative to future work.	Create a new paragraph in the present issues	See comment 64.
<u>64</u>	NO	6.1.3		Q	Different stakeholders are working together in a lot of countries and have done so for decades. Why is this so difficult?	Delete text and add best practice on unique identifiers.	Unique identifier shared by all AD stakeholders is quite challenging (at least in some countries). It is different from having a unique identifier within a given dataset.
<u>65</u>	Stat FI	6.1.3		G	Unique and persistent identifiers allow a much more generic solution than identifiers in a geographic address database (as said on page 14). The scope of the text is quite narrow. A suggestion is that you could have a chapter on unique identifiers and linked data/linked open data that would give a vision of the future and possibilities that they would enable. Encouragement to create high quality, high location quality, easy accessible, and unambiguous national address solutions to benefit all data users.		Consider with Comments 63 and 64.

<u>66</u>	Geostat	6.1.3			This is perhaps a bit of a misunderstanding of GEOSTAT 2. The GEOSTAT 2 proposals should be understood in line with the Core Data recommendation. E.g. 1. a unique persistent identifier of an address means two things: A unique, non natural language identifier, such as an UUID/inspireID. 2. A unique, natural language identifier following the locator logics of the addressing system. E.g. Street name + street number + address area (post code area etc). If these two types of identifiers are provided, just like recommended in the document, we will be very happy. The first identifier is useful for machine-based processing of data where natural language is not important (or even a problem). The second identifier is important for implementation of address validation in collection of statistical or administrative data. A person providing data needs to be able to verify his or hers address against an index with an address expressed in natural language.		Consider with Comments 63 and 64.
<u>67</u>	DE	7.1.1	Figure	E	Another colour for Core Recommendation would be better. The colours for Core Recommendation and Good Practice are difficult to distinguish.	Change the dark green, for example, to red.	NA It is more logical to use same colour (general idea of selected information) with different values (giving the idea of priority)
<u>68</u>	DE	7.1.1	NOTE 2	E	Work uniformly within the document and write a capital letter at the beginning of the sentence.	NOTE 2: In INSPIRE, there is the association ...	Accepted
<u>69</u>	IGN FR	7.1.1	Figure 1	T	Comment on the figure to be deleted. Title and number are missing	Correct figure; provide number and title	Accepted
<u>70</u>	IGN FR	7.1.1	7.1.1		This child/parent relationship can also be helpful for statistics, geography or coherence between administrative entities. To describe more the interests.	Develop parent/child interest => could be in future work? It could help to understand complex infrastructures.	Accepted
<u>71</u>	IGN FR	8		T	Requirements of statistical community were taken into account (e.g. by taking requirements from the Geostat 3 project reports).	To be added in the methodology.	Accepted

[1] For internal use only. Not to be completed by reviewers.

[2] Use "3.1" instead of "Clause 3.1" or "Chapter 6.1". This makes grouping of comments easier.

[3] E.g., Table 1

[4] Type of comment can be G (general), E (editorial), T (technical), or Q (question)

[5] The proposed change must be as precise and concrete as possible.