To: **The ASSESS CT Consortium**
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From: Don Sweete, CEO, SNOMED International

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SNOMED International welcomes the opportunity to review the ASSESS CT Consortium's "Assessing SNOMED CT for Large Scale eHealth Deployments in the EU" report. On behalf of SNOMED International, I would like to start by applauding the goal setout by the ASSESS CT Consortium to make a significant contribution to the European debate on semantic interoperability, as well as the rigorous pursuit of its achievement.

As the predominant focus of the report, SNOMED International welcomes the opportunity to respond to the thought leadership demonstrated in the report's 5 overarching recommendations. To contribute to the ongoing conversation on how to best progress semantic interoperability across Europe through a core reference terminology, SNOMED International has provided commentary specific to the ASSESS CT recommendations for standards development organizations (SDOs.)

Recommendation #1:

- Any decision about the adoption and role of terminological resources, including SNOMED CT, must be part of a wider, coherent and priority-driven strategy for optimizing the benefits of semantic interoperability in health data, and of the overarching eHealth strategy of the European Union and its Member States.
- **SDO Recommendation:** SDOs and other relevant specification developers should collaborate to produce an overview of how their different portfolios

of interoperability assets align with each other and which ones can be adopted jointly to support different semantic interoperability business functions. This includes the binding of terminology systems to information models and other structured representations of health data.

SNOMED International Response:

- SNOMED International has actively embraced partnerships and agreements with fellow standards and health focused organizations and supports ASSESS CTs recommendation for collaboration among standards development organizations as a key tactic to achieving increased semantic interoperability across Europe. This is evidenced by our existing partnerships and agreements with HL7, LOINC, WHO, DICOM, etc, as well as leadership and participation on the Joint Initiative Council on SDO Global Health Informatics Standardization.

- SNOMED International will lend itself to this recommendation and looks to the ASSESS CT consortium to support formalization of a governing body to guide the regional strategy for optimizing both the approach to semantic interoperability, as well as the overarching eHealth strategy of the EU and its member states.

Recommendation #2:

- SNOMED CT is the best available core reference terminology for cross-border, national and regional eHealth deployments in Europe.

- **SDO Recommendations:**
    - Recognizing that the primary role for SNOMED CT in Europe may be as a reference terminology, IHTSDO should prioritise maintaining and enriching the content and quality of the ontological underpinning and the concept hierarchies of SNOMED CT.
    - IHTSDO should negotiate, with the eHealth Network and the European Commission, flexible license arrangements to support Member States, individual ICT vendors and non-vendor bodies with adopting SNOMED CT as a reference terminology, at varying scales of piloting and actual use.

- IHTSDO, European Member States and the European Commission must prioritize sponsoring more independent research of the benefits and challenges in using SNOMED CT as the principal (core) reference terminology to support health, care and research use cases.

SNOMED International Response:

- SNOMED International asserts that this recommendation is at the core of our business. Driven by our organization's strategic directions, maintaining and enriching content and quality of SNOMED CT's ontological foundation and concept hierarchies remains a dominant focus of the organization to benefit SNOMED CT members, affiliates and partners. It should be noted that SNOMED International works with our members to set these priorities and also looks to the wider community to produce content that can be promoted to the international edition.

- SNOMED International continues to be open to entering into discussions pertaining to the flexible licensing agreements for SNOMED CT use with the European Commission. There have been many meetings with the EU on this topic. In recent years, technology and industry has evolved in terms of the use and application of clinical terminology and this has prompted SNOMED International to negotiate global and mobile licensing arrangements to address and meet customer needs.

- SNOMED International has continuously supported the use of SNOMED CT through European projects and implementations. Demonstrated by extending SNOMED CT access without charge to the epSOS initiative in support of European cross-border interoperability to the end of 2017, the organisation has been a proud supporter of its implementation as well as the benefits to health it yields.

- SNOMED International agrees that undertaking SNOMED CT use research demonstrates the value and resultant benefits of SNOMED CT as the best available core reference terminology for cross- border, national and regional eHealth deployments in Europe. As a means of progressing this recommendation, SNOMED International has initiated benefits evaluation conversations with a targeted sample of health information technology vendors to formalize research activities. In addition to exploring use research with partnering vendors, SNOMED International welcomes the opportunity to partner with European Union countries to initiate benefits

evaluation activities as a means to demonstrating the comprehensive nature of the SNOMED CT product.

Recommendation #3:

- SNOMED CT should be part of an ecosystem of terminologies, including international aggregation on terminologies (e.g., the WHO Family of Classifications), and user interface terminologies, which address multilingualism in Europe and clinical communication with multidisciplinary professional language and lay language.
- **SDO Recommendation:** SDOs should collaborate with clinical professional organizations, the health systems of European Member States, and with the European Commission in supporting the development and maintenance of end user interface terminologies in the native languages of health care actors and patients, across Europe.

SNOMED International Response:

- SNOMED International currently collaborates with most other players in the terminology industry. This collaboration includes formal agreements between parties committing to the development of maps, linkages and development of content. Maps to most of the WHO classifications used globally are maintained and updated by SNOMED International on a continuing and ongoing basis.

- SNOMED International recommends that the health informatics and health information standards industry commit to look at new ways to effectively eliminate the need for maps which would reduce the overall cost and complexity to end users.

- SNOMED CT is currently released in English and Spanish bi-annually. Given that most non-English and Spanish speaking SNOMED International members engage in translation of SNOMED CT, the organisation has recently invested in the translation of a starter set and starter guide in four languages. (German, French, Simplified Chinese and Japanese). These translated starter sets will be released in Beta format in the spring of 2017.

Recommendation #4:

- The adoption of SNOMED CT should be realized incrementally rather than all at once, by developing terminology subsets that address the interoperability requirements for priority use cases and expanding these sets over a number of years.

- **SDO Recommendation:** IHTSDO, European Member States, and the European Commission must support and fund the development of training resources and adoption support tools (such as mapping tools) to facilitate the wider high-quality adoption of SNOMED CT as a reference terminology. These should be targeted at enabling stakeholders to contribute in each of their roles to better data quality and semantic interoperability, rather than only how to use the specific terminology.

SNOMED International Response:

- Broadening SNOMED CT use to include improved data quality and semantic interoperability beyond its sole use as a reference terminology is in line with the strategic directions of the organization. Further, there are a number of resources and adoption support tools already in place to enable success. For example, SNOMED International offers complimentary access to its e-Learning server and SNOMED CT document library. The E-Learning server offers a host of online resources that were developed to extend the depth and breadth of knowledge of SNOMED CT in the global community. Coursework also addresses a deeper understanding of SNOMED CT that is sufficient for those engaged in various parts of the implementation process – from the decision to adopt SNOMED CT, through to specification and procurement and/or design and development of SNOMED CT enabled solutions, to deployment and practical use.

- Contributing to the satisfaction of this recommendation, SNOMED International mapping tools are open source and available to all parties producing terminology maps. Further, in regards to generating specific use cases and value sets beyond what SNOMED International currently provides, partner organizations accountable for value sets in the United States (NLM), United Kingdom (UKTC), as well as in Australia and Canada have a whole host of subsets that can be leveraged by the global community. With that in mind, it behooves SNOMED International,

European Member States and the European Commission to explore ways to make use cases and value sets easier to locate and access by the global community. Resources require investment and development in a directory or browser approach to ease value set access, search and use functions is a potential project that the interested parties may wish to explore.

Recommendation #5:

- Mechanisms should be established to facilitate and coordinate European Member State cooperation on terminology and semantic interoperability, including common areas of governance across national terminology centres, eHealth competence centres (or equivalent national bodies).
- **SDO Recommendation:** All SDOs contributing to the development and maintenance of semantic interoperability assets should be prepared to contribute to strategic and governance structures that become established to support Member State co-operation in the adoption of a single core reference terminology for Europe.

SNOMED International Response:

- By virtue of its organizational heritage and provenance, SNOMED International is a driving force, fully committed to furthering the adoption of a single core reference terminology for Europe. In terms of recognizing the benefits arising from established governance structures, SNOMED International fully recognizes the critical necessity and related benefits that result from implementing strong governance mechanisms that guide business and member priorities. SNOMED International also follows a membership model that encourages the sharing and leveraging of lessons learned through active and frequent participation of member countries and affiliates. Further, the organization's priority investments in the continuous development of educational programming directly for the benefit of the health and terminology community clearly demonstrates ongoing commitment. In this vein, the resolve and commitment of SNOMED International remains unchanged and the organization offers its continued willingness to participate in European Member State and European Commission activities to achieve a Europe-wide single core reference terminology.

In conclusion, SNOMED International is fully committed to moving the global semantic interoperability agenda forward and is aware that the most effective way to move the yardstick is by collaborating with the many stakeholders that are likeminded, with similar goals. We welcome further discussions with the European Commission and European member states as we continue down this journey.

Thank-you for this opportunity to respond and participate,

Don Sweete
Chief Executive Officer
SNOMED International

cc: SNOMED International General Assembly
         SNOMED International Management Board
         European Commission, Gerald Cultot
         European Commission, Tapani Piha