P7010

Submitter Email: laura@happycounts.org
Type of Project: Modify Existing Approved PAR
PAR Request Date: 12-Sep-2019
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Status: Modification to a Previously Approved PAR
Root PAR: P7010 **Approved on:** 15-Jun-2017
Project Record: P7010

1.1 Project Number: P7010
1.2 Type of Document: Recommended Practice
1.3 Life Cycle: Full Use

2.1 Title: Recommended Practice for Assessing the Impact of Autonomous and Intelligent Systems on Human Well-being

Changes in title: ~~Wellbeing~~Recommended ~~Metrics~~Practice ~~Standard~~ for ~~Ethical~~Assessing ~~Artificial~~the ~~Intelligence~~Impact ~~and~~of Autonomous and Intelligent Systems on Human Well-being

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3.1 Working Group: Well-being Metric for Autonomous and Intelligent Systems (A/IS) (SMC/SC/WellbeingA/IS)
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Name: Laura Musikanski
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3.2 Sponsoring Society and Committee: IEEE Systems, Man, and Cybernetics Society/Standards Committee (SMC/SC)
Contact Information for Sponsor Chair
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None

4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 12/2018
4.3 Projected Completion Date for Submittal to RevCom
Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 10/2019

5.1 Approximate number of people expected to be actively involved in the development of this project: 40
5.2 Scope: This recommended practice establishes wellbeing metrics relating to human factors directly affected by intelligent and autonomous systems and establishes a baseline for the types of objective and subjective data these systems should analyze and include (in their programming and functioning) to proactively increase human wellbeing.

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5.3 Is the completion of this standard dependent upon the completion of another standard: No
5.4 Purpose: The Recommended Practice for Assessing the Impact of Autonomous and Intelligent Systems on Human Well-being enables programmers, engineers, and technologists to better consider how the products and services they create can increase human wellbeing based on a wider spectrum of measures than growth and productivity alone. Today, affective systems utilizing emotion recognizing sensors are quantified primarily by their economic value in the marketplace

Changes in purpose: The ~~Wellbeing~~Recommended ~~Metrics~~Practice ~~Standard~~ for ~~Ethical~~Assessing ~~Artificial~~the ~~Intelligence~~Impact ~~and~~of Autonomous and Intelligent Systems on Human Well-being enables programmers, engineers, and technologists to better consider how the products and services they create can increase human wellbeing based on a wider spectrum of measures than growth and productivity alone. Today, affective systems utilizing emotion recognizing sensors are

beyond their efficacy within certain fields (psychology, etc). While it is often understood that ethical considerations for intelligent and autonomous systems might hinder innovation by the introduction of unwanted regulation, without metrics that value mental and emotional health at both an individual and societal level, innovation is impossible to quantify. The introduction and use of these metrics for programmers and technologists means that beyond economic increase human wellbeing can be measured and better improved.

quantified primarily by their economic value in the marketplace beyond their efficacy within certain fields (psychology, etc). While it is often understood that ethical considerations for intelligent and autonomous systems might hinder innovation by the introduction of unwanted regulation, without metrics that value mental and emotional health at both an individual and societal level, innovation is impossible to quantify. The introduction and use of these metrics for programmers and technologists means that beyond economic increase human wellbeing can be measured and better improved.

5.5 Need for the Project: In 2007, The European Commission hosted The "Beyond GDP" conference where over 650 attendees recognized that the primary metric and paradigm of value for the world measures growth and income but doesn't incorporate factors like the environment or mental and emotional health in its calculations. The GDP goes up in a traffic jam because of increased gasoline consumption, but few would argue the humans in the cars feel a sense of increased happiness or wellbeing. In 2008, The President of the French Republic, Nicholas Sarkozy asked Joseph Stiglitz to chair a Commission on The Measurement of Economic Performance and Social Progress now commonly referred to as The Stiglitz Report. In it, the Commission stated that, "the time is ripe for our measurement system to shift emphasis from measuring economic production to measuring people's well-being."

Today the societal value of intelligent and autonomous systems is measured largely by their increase of economic production. While issues of job displacement or Universal Basic Income are often discussed, the widespread effect of these systems on human agency and emotion is diverse in scope with a lack of unifying metrics to provide clarity on further development that could best increase individual or societal wellbeing. This Standard will begin to provide this unifying, cross-sector clarity designed to increase innovation for the intelligent and autonomous marketplace while providing common measures to provably increase human wellbeing.

5.6 Stakeholders for the Standard: Manufacturers, service and solution providers, programmers, engineers, technologists

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Intellectual Property
6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No
6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

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7.1 Are there other standards or projects with a similar scope?: No
7.2 Joint Development
Is it the intent to develop this document jointly with another organization?: No

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8.1 Additional Explanatory Notes: The Working Group feels IEEE P7010 fits the standard classification of Recommended Practice. The description for a Standard in the classification of Recommended Practice is recommending "a certain course of action is preferred but not necessarily required." Please see the information below for rational.

IEEE P7010 provides a process and states a position for measuring and managing impacts on human well-being from A/IS
IEEE P7010 provides a course of action that is optional and, upon its issuance, will be the only of its kind
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The Working Group also voted and approved to change the name to Recommended Practice for Assessing the Impact of Autonomous and Intelligent Systems on Human Well-being, finding this name to be within the scope and more precisely descriptive.