

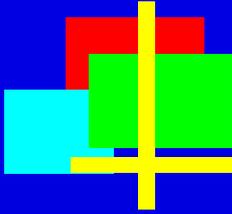
# Introduction – Research and Development Session (ISIC 7210 and 7220)

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25<sup>th</sup> Meeting of the Voorburg Group  
Vienna, Austria

John Murphy

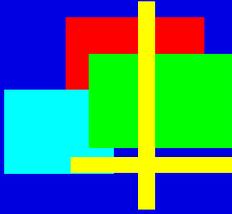
Assistant Division Chief for Classification Activities  
U.S. Census Bureau



# Overview

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- Review of Classifications
- Mini Presentations on Turnover
- Mini Presentations on Prices
- Discussion



# Presenters

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- **Mini Presentations Turnover**

Jakob Kalko – Statistics Norway

Hanna Fischer – Federal Statistical Office of Germany

Mieke Berends-Ballast – Statistics Netherlands

- **Mini Presentations Prices**

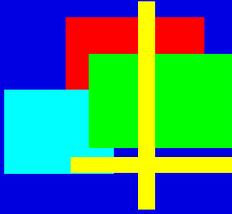
Johanna von Borstel – Federal Statistical Office of Germany

Ildikó Hamvainé Holocsy – Hungarian Central Statistical Office

David Friedman – US Bureau of Labor Statistics

- **Discussant**

Mike Horrigan – US Bureau of Labor Statistics



# Industry Classification

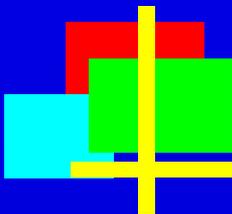
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- Most Industrial Classifications are similar

ISIC 7210 – Natural Sciences and Engineering R&D

ISIC 7220 – Social Sciences and Humanities R&D

- NACE and NAICS include an additional industry split for research and development in the area of biotechnology
- Japan makes a high level split between ancillary or auxiliary units and research institutes and then the traditional breaks with additional detail below natural sciences
- ANZSIC has a single industry for R&D



# Product Classification

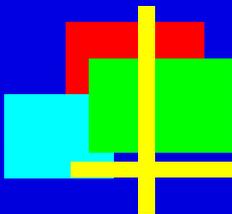
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Product Classification are somewhat more varied in detail and arrangement

CPC V. 2 includes 15 subject based subclasses (e.g., chemistry and biology, economics, law, agricultural sciences)

CPA 2008 (16 detailed products) and ANZSPC (22 detailed products) are structured similarly

NAPCS United States ( 267 detailed products) uses a different approach



# Proposed NAPCS US Details

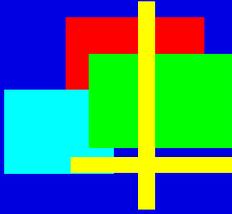
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NAPCS US uses the aggregation structure of the Frescati Manual 2002 as the basis for product aggregation rather than the basic industry format.

1. Production services for basic research
2. Production services for applied research
3. Production services for product development
4. Licensing rights to use intellectual property
5. Intellectual property works
6. Options agreements

Aggregations 1-3 are then further broken out by subject categories (262 detailed products)

Aggregations 4-6 are included to cover other significant outputs of R&D establishments



# Before you think we're INSANE!

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## What the 2007 Economic Census actually collected using the NAPCS products

18 products combining basic and applied research by subject of the  
research

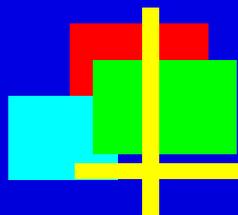
2 development services products (goods and processes, systems, or  
methods)

2 licensing of rights products

1 outright sale of original works of intellectual property

5 miscellaneous products (engineering services, resale of merchandise,  
etc.)

4 inquiries regarding source of funding covering grants, investment  
income and gains or losses from assets sold



# Questions?

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