

# New Work Item Proposal : SLIM ISO 9995

Proposal submitted by **DIN** Germany to **ISO/IEC JTC 1/SC 35/WG1**

Title: Slim ISO 9995 (rework for standard ISO 9995 series)

Status: Request for a New Working Item

## Reason for the NWI Proposal:

- No obstacles for IT Keyboard improvements to support today's markets needs
- Standardize where necessary, provide freedom where possible to support innovations Support ergonomics aspects (e.g. smaller keyboard in width allows to have the mouse in a position to better adopt a neutral working position while using a personal computer.
- To broaden the applicability of ISO 9995 standards for keyboards in mobile IT equipment (like Notebooks, Sub-Notebooks, etc.)
- Strengthen this standard to allow a better adaptability

# NWI Proposal: Rework of ISO 9995

## Items to be presented:

- **ISO 9995 - current situation**
- **Today's Market Needs**
- **What if ... ?**
- **Desired Keyboard Standard**

# ISO 9995 – current situation

## ISO 9995 – Keyboard layouts for text / office systems

with sub-parts

- Part 1 = General Principles governing keyboard layouts
- Part 2 = Alphanumeric section
- Part 3 = Complementary layout and alphanumeric zone
- Part 4 = Numeric section
- Part 5 = Editing section
- Part 6 = Function section (merge with part 5 due to overlapping information)
- Part 7 = Symbols used to represent functions
- Part 8 = Allocation of letters to the keys of a numeric keypad

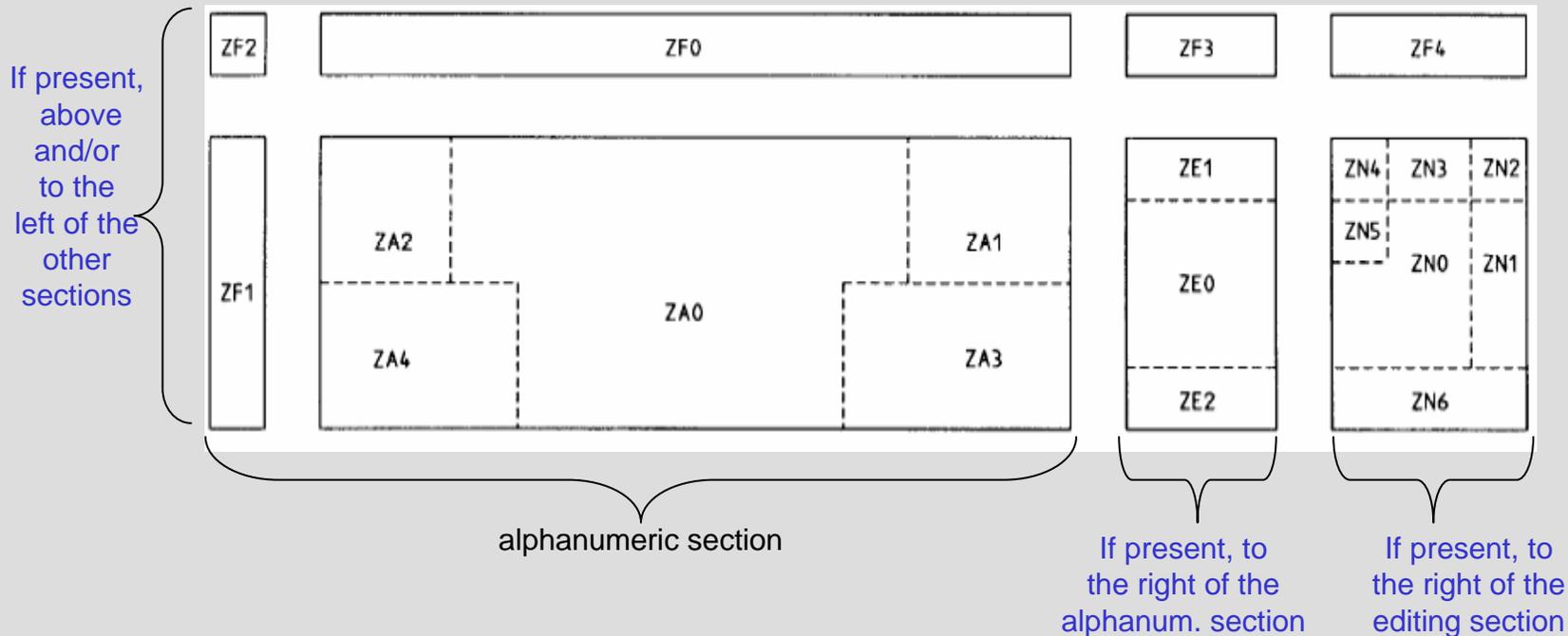
# ISO 9995 – Part 1: General Principles - layout

alphanumeric section = Zone ZA0, ZA1, ZA2, ZA3, ZA4

function section = Zone ZF0, ZF1, ZE2, ZF3, ZF4

editing section = Zone ZE0, ZE1, ZE2

numeric section = Zone ZN0, ZN1, ZN2, ZN3, ZN4, ZN5, ZN6



**ISO 9995 looks quite complex !**

# Today's Market Needs

Following market needs are identified and examples on the next pages show current products found on Internet:

- **Mobile IT products with keyboards**
- **Keyboard innovations**
- **Ergonomics aspects**
- **Globalization aspects**

# Today's Market Needs - Mobile IT Products

## Handhelds / PDA's



## Virtual Keyboards



## Notebooks / Sub-Notebooks



**Keyboards on mobile equipment contain an "edit zone" that is not in compliance to ISO 9995 due to spacing issues !**

# Today's Market Needs - Keyboards innovations

Divided keyboards



Keyboards for specific market needs



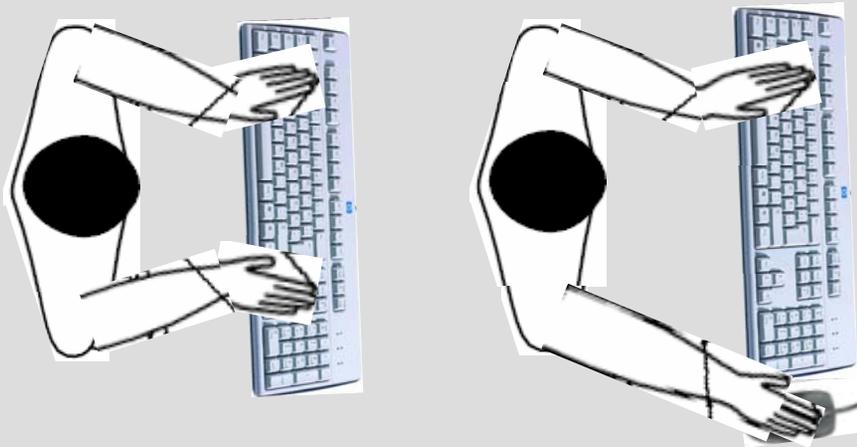
Additional keys located on variable positions



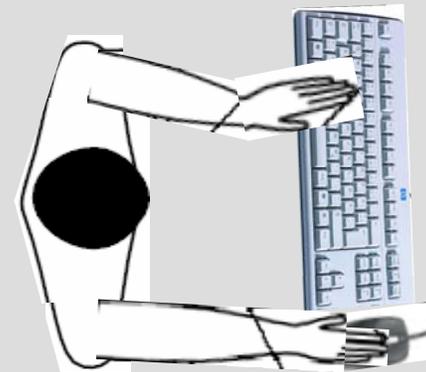
**A more flexible Keyboards layout for Editing / Function keys helps to bring innovative keyboards in compliance to ISO 9995 !**

# Today's Market Needs – Ergonomics aspects

Actual user posture with ISO 9995 compliance keyboard and mouse



Saving space on right keyboard site allows a better user posture !

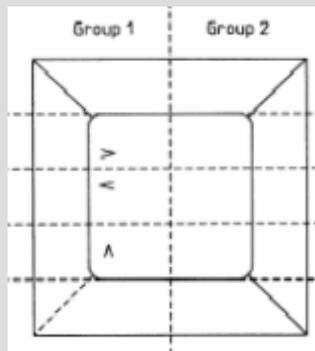


**Current ISO 9995 Keyboard layout forces users to have a posture that may lead to long term health issues !**

**(Repetitive strain injury (RSI) like carpal tunnel syndrome, stress for tendons and nerves in the hand, wrist, arm and even shoulders and neck !**

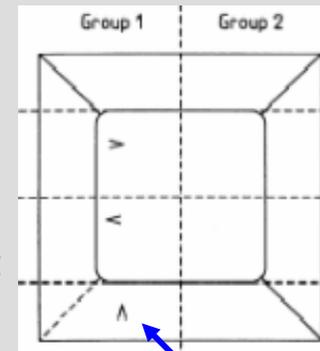
# Today's Market Needs – Ergonomics aspects

Legibility of keyboard imprints may be hard for people with eye problems and elderly people.



Three level allocation market on keytop

Three level allocation market on keytop one level market on keyface



For Notebooks very limited space !

**Current ISO 9995 standard requires “level three markings” on a small keytop part (1/3 on left part of keytop) for Group 1 symbols.**

**Group 2 markings got the same on the right keytop. Is Group 2 marking used at all today ?**

# Today's Market Needs – Globalization aspects

Purchasing agents in procurement departments in enterprise business want to get an easy overview about desired keyboard layouts without forced to read all possible country layout.



**Current ISO 9995 standard  
do contain no reference for possible  
national keyboard layouts?**

# What if ISO 9995 won't be revised ?

Following scenarios could be possible:

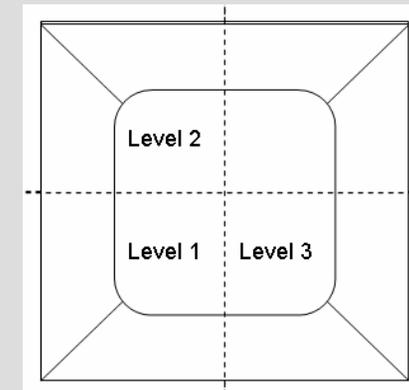
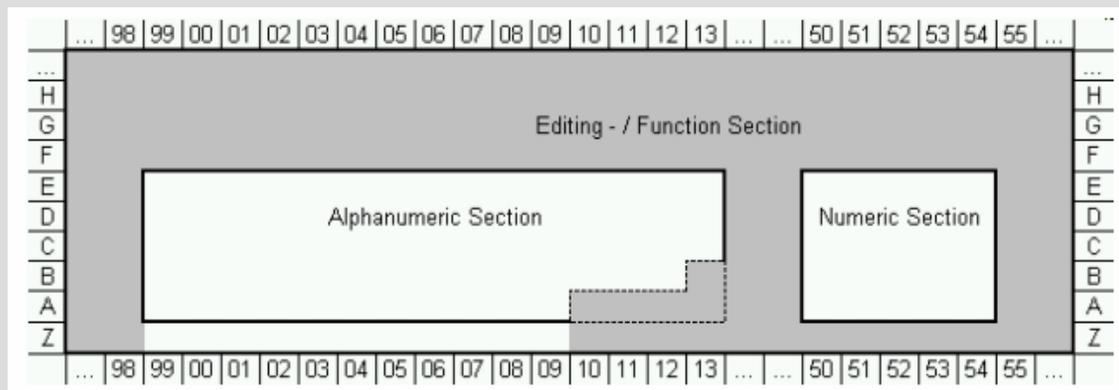
- **Keyboards covering special ergonomics requirements can not be in compliance to ISO 9995 and are excluded from this standard therefore !**
- **Mobile IT Equipment with keyboard can not be in compliance to ISO 9995 and are excluded from this standard therefore!**
- **More and more keyboard manufacturer are forced to ignore the voluntary ISO 9995 standard since innovations are restricted.**

# Desired Keyboard Standard

- **Clear requirements for alphanumeric keyboard part.  
This strengthen this standard to allow a better adaptability.**
- **Possibility to locate Editing and Function Keys as suitable for tasks.**
- **Easy understandable and applicable standard  
(e.g. including references to national keyboard layouts.)**
- **IT Keyboard innovations in compliance to ISO 9995 possible**
- **Support ergonomics aspects for keyboards**
- **Broad support in the market for ISO 9995 keyboard standard**

# Desired Keyboard Standard

## Two examples of Revised ISO 9995 (SLIM ISO 9995)



### SLIM ISO 9995 – part 1:

#### changing sections allows:

- appliance to mobile equipment
- have ergonomics requirements included
- open for keyboard innovations
- broaden acceptance of this standard

Letter legibility when Group 1 Level 3 markings are allowed as shown in the picture above.