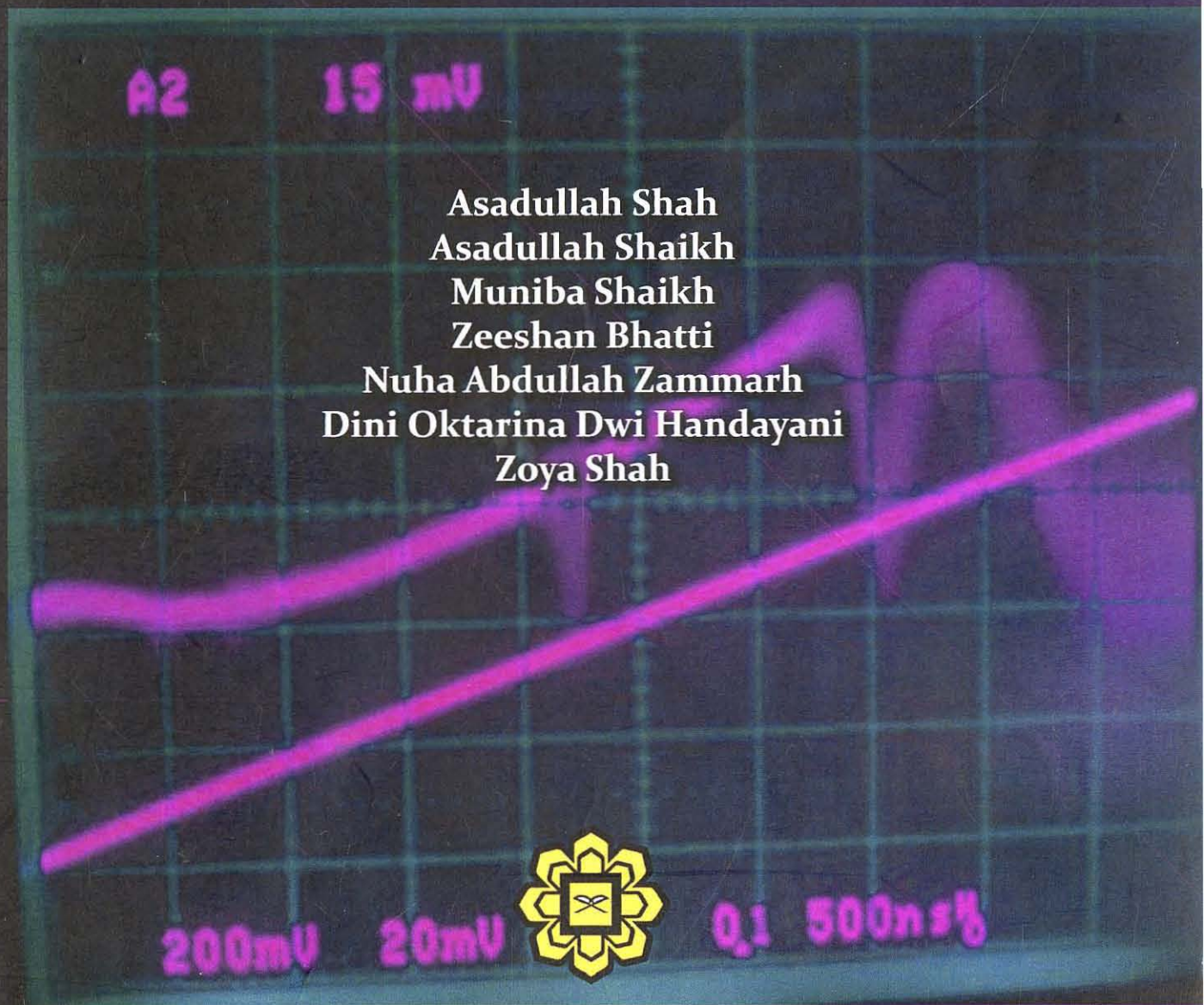
STATISTICAL TIME DIVISION MULTIPLEXING ARCHITECTURES AND DESIGN



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IIUM Press
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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Published by:

IIUM Press

International Islamic University Malaysia

First Edition, 2011

Perpustakaan Negara Malaysia Cataloguing-in-Publication Data

Asadullah Shah

Statistical Time Division Multiplexing Architecture and Design / Asadullah Shah ... [et al.].

ISBN: 978-967-418-190-1

Member of Majlis Penerbitan Ilmiah Malaysia – MAPIM
(Malaysian Scholarly Publishing Council)

Printed by:
IIUM PRINTING SDN. BHD.
No.1, Jalan Industri Batu Caves 1/3
Taman Perindustrian Batu Caves
Batu Caves Centre Point
68100 Batu Caves
Selangor Darul Ehsan

21. Concept of Frames Discarding and Multiplexing efficiency

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21.0 Abstract

At low bit rates speech is coded frame by frame, each frame of a size of 20-30ms. Perceptually, each frame may be different, depends upon the speech signal properties (voiced or unvoiced). The frames with lower perception may be one of the potential candidates to be dropped and reconstructed to maximize the bandwidth of the systems. This chapter explains to how these frames might be identified and used for STDM designs.

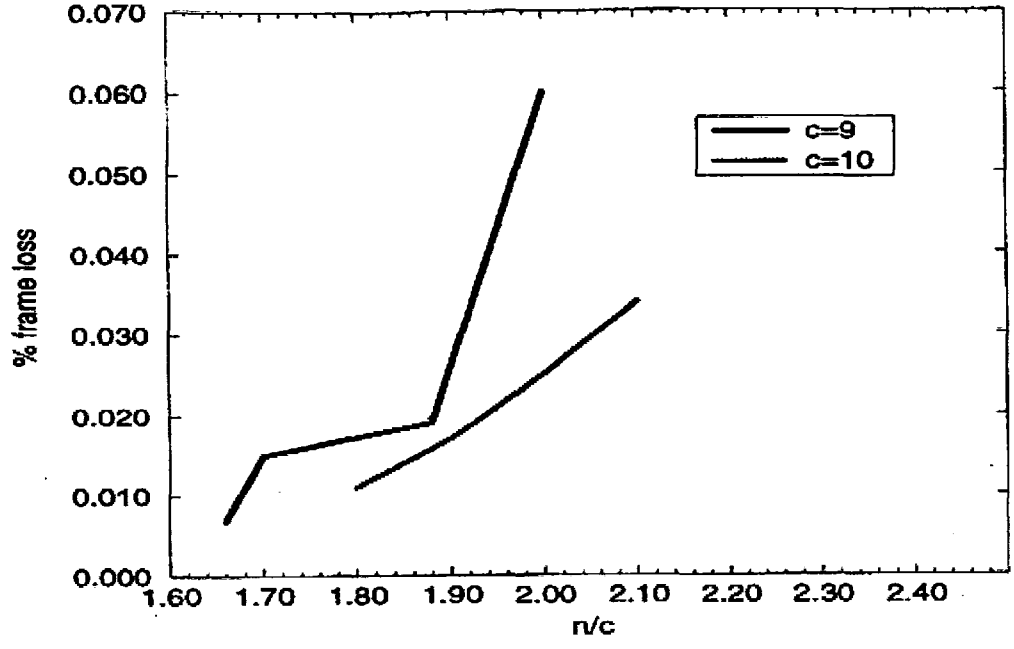

Figure 21.0-1: DSI advantage for conversational speech

In statistical multiplexing users are basically allocated bandwidth less than their actual peak requirements, that is, they are allowed bandwidth for transmission during talkspurts. As the number of users are increased higher than the output link capacity. The simultaneous talkspurts from e users are also increased. During higher activities, some user's talkspurts have to be