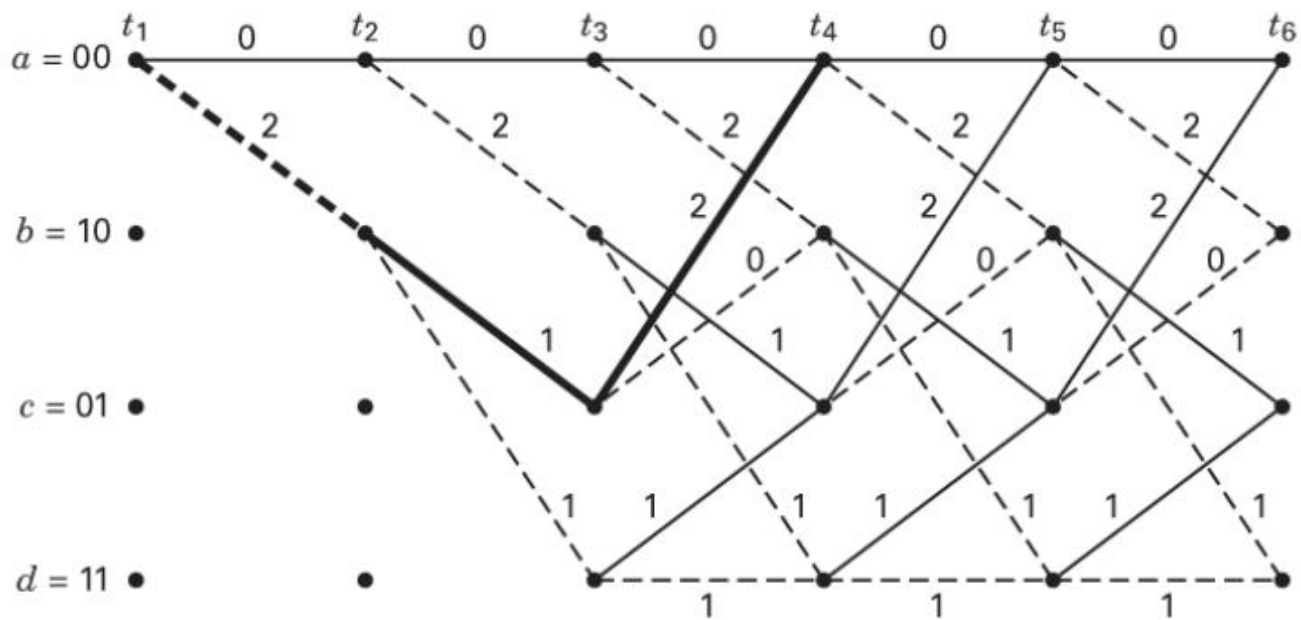
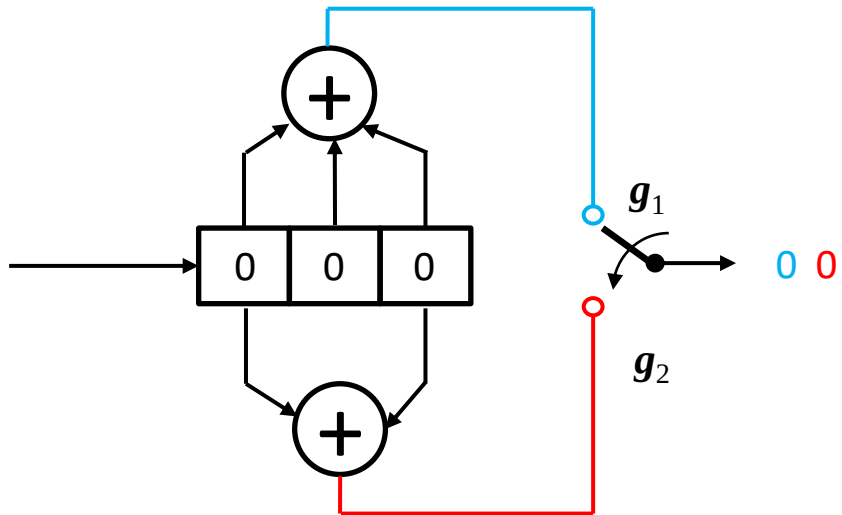
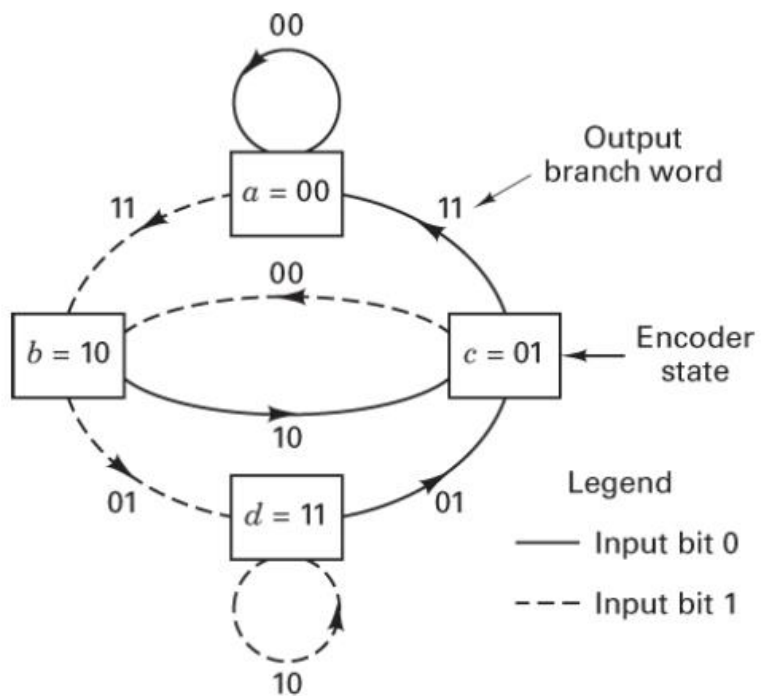


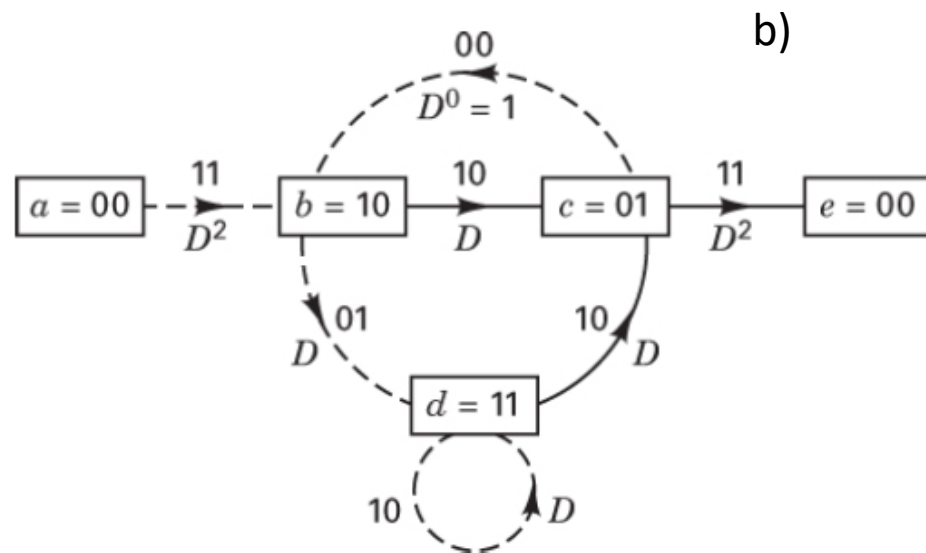


Minimálna voľná
vzdialenosť

zdroj: B. Sklar, F. Harris.:
Digital Communications,
Pearson Education, Inc.,
2021



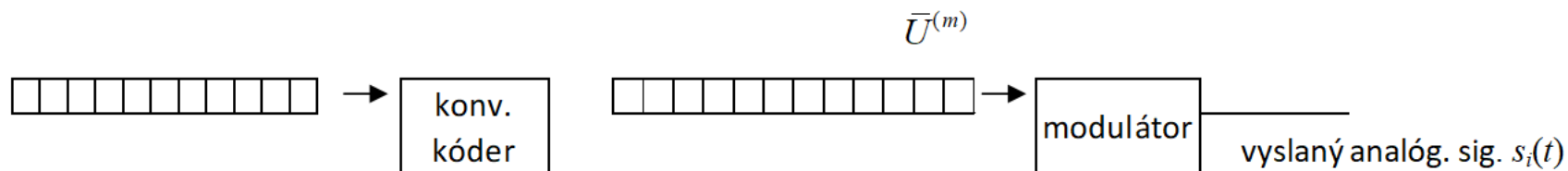
a)



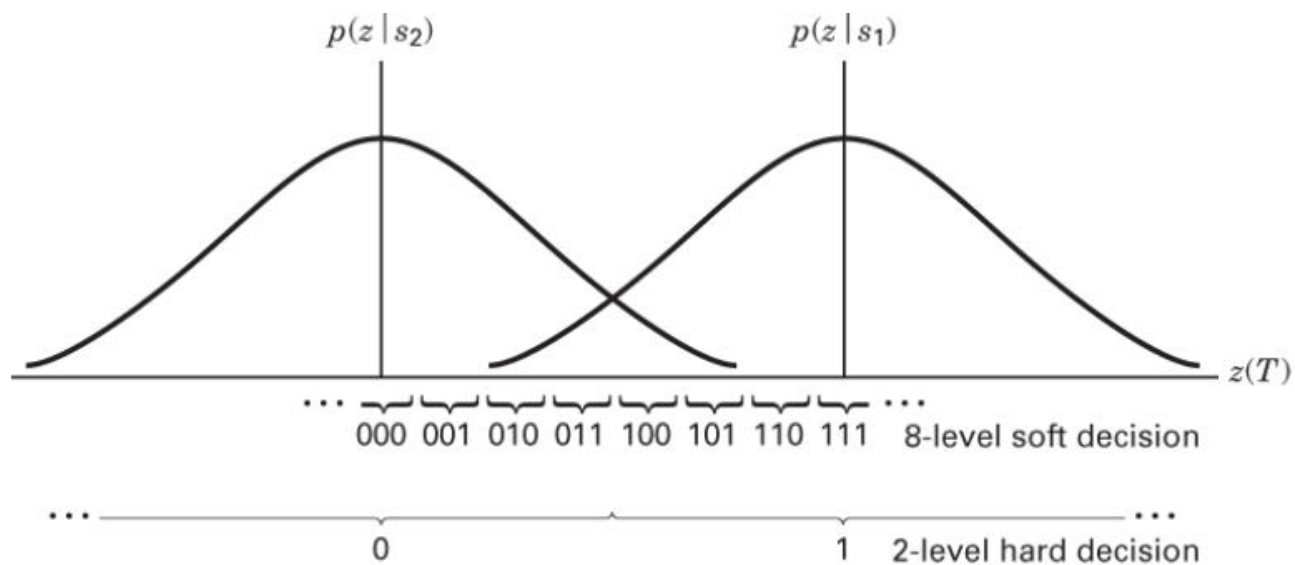
b)

Normálny: a) a rozvinutý: b)
stavový diagram

zdroj: B. Sklar, F. Harris.:
Digital Communications,
Pearson Education, Inc., 2021



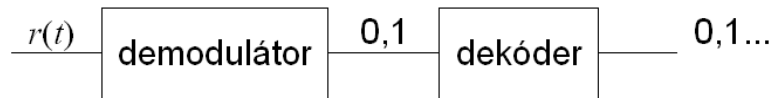
Vysielač s konvolučným kódom



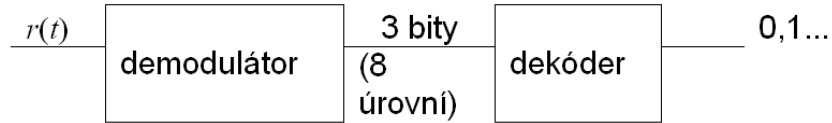
Výstup z detektora

zdroj: B. Sklar, F. Harris.:
Digital Communications,
Pearson Education, Inc., 2021

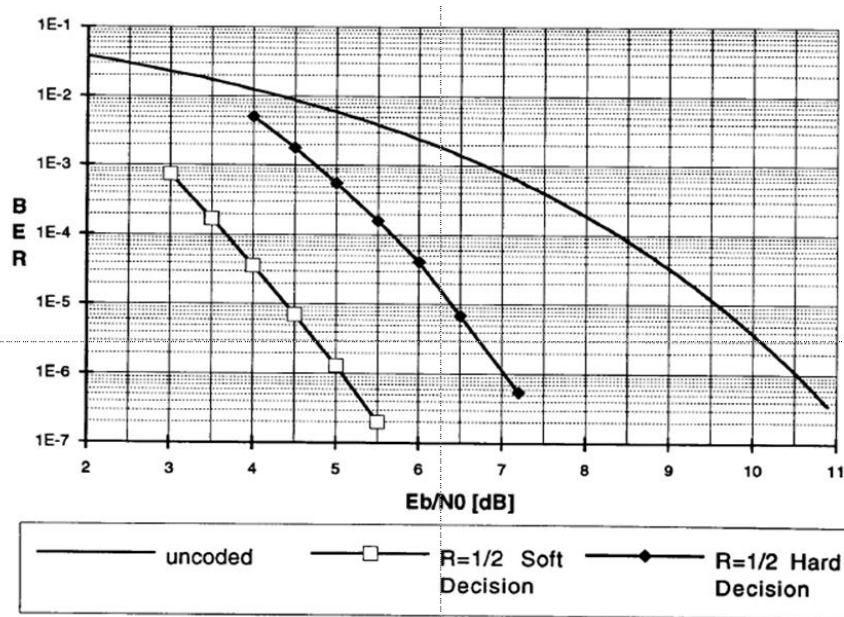
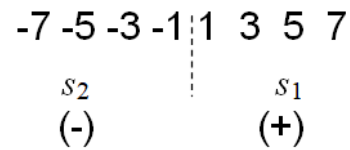
Tvrde dekódovanie:



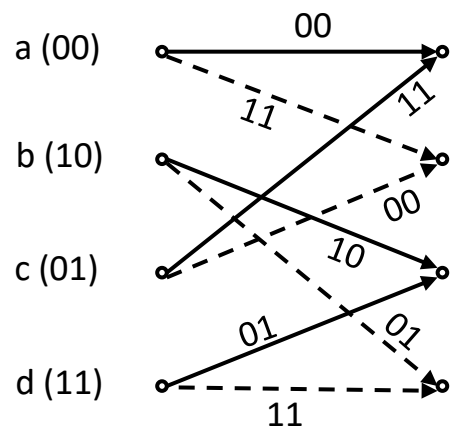
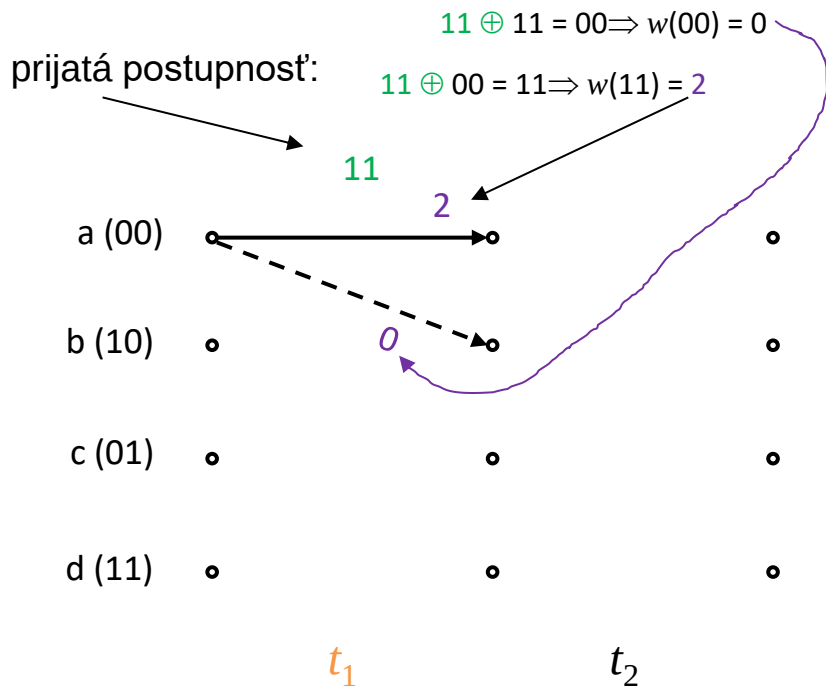
Mäkké dekódovanie:



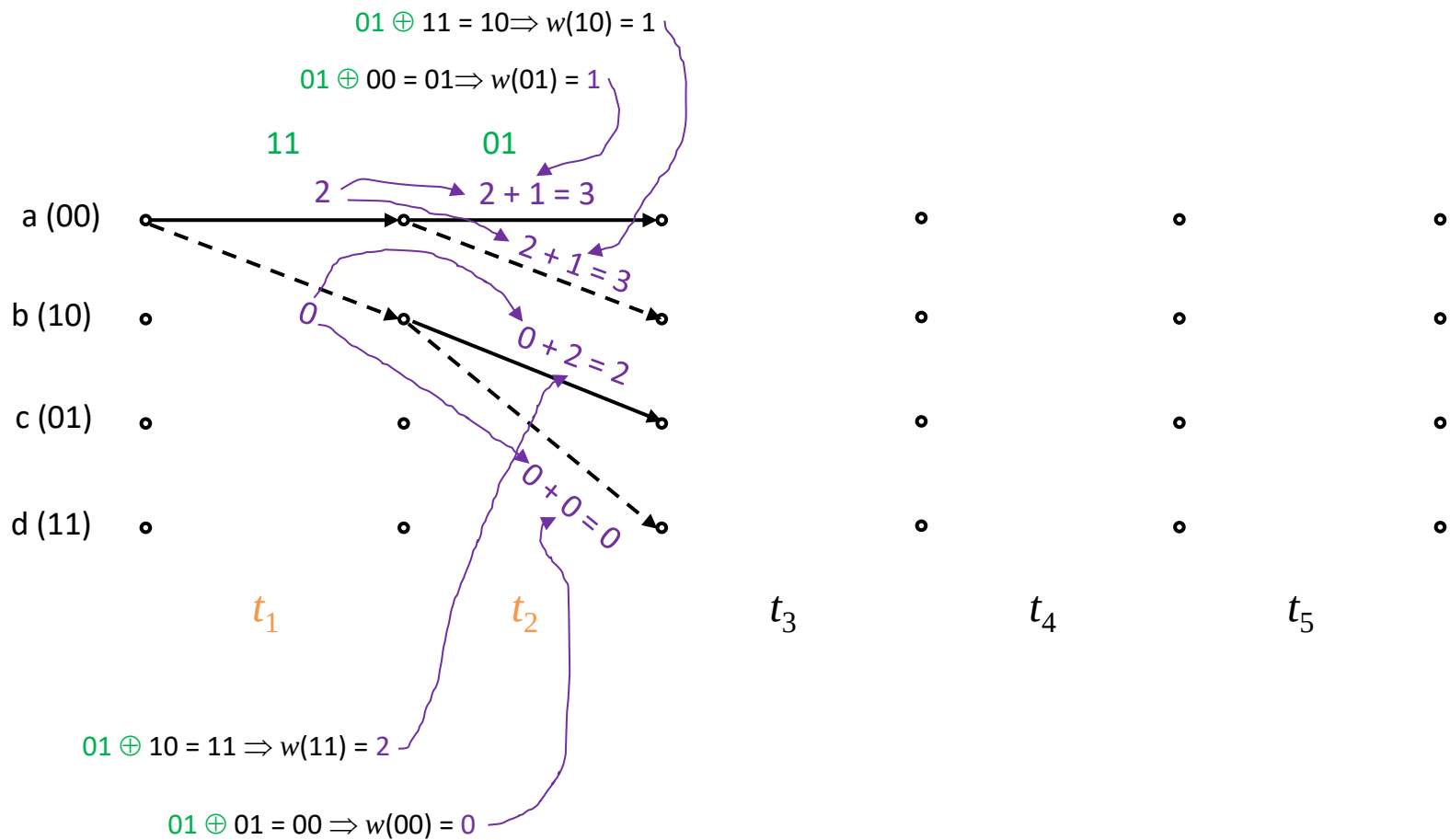
8 – úrovňová mäkká rozhodovacia metrika :

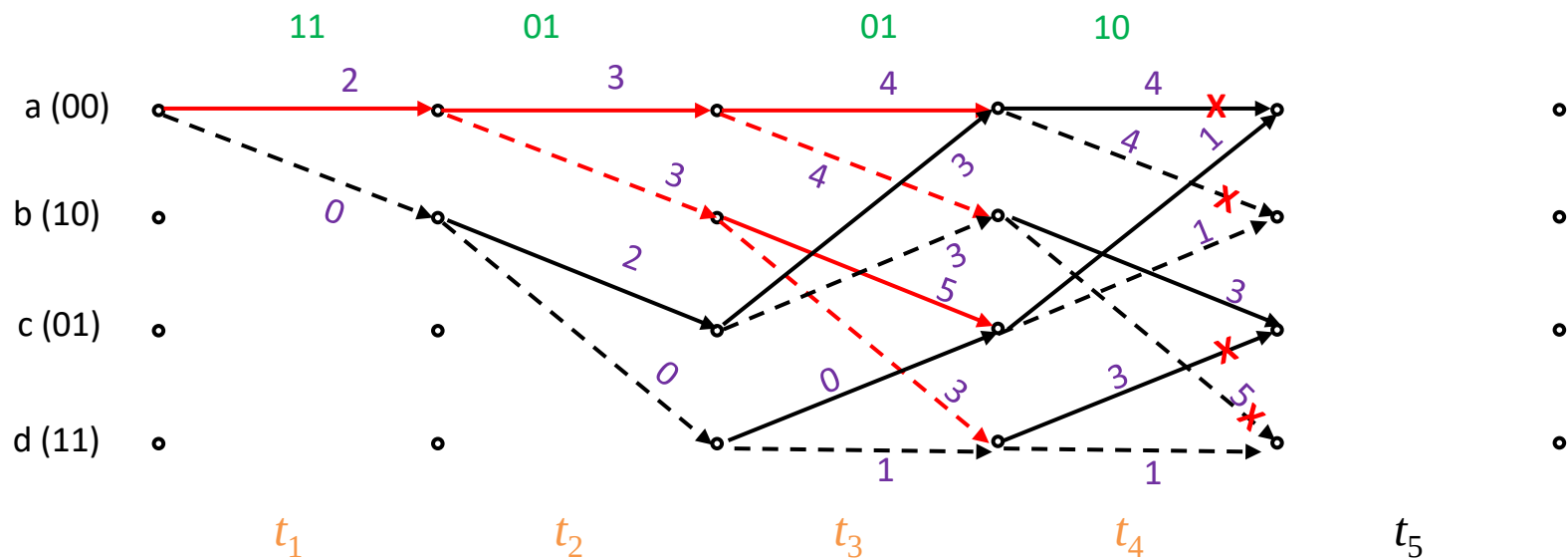
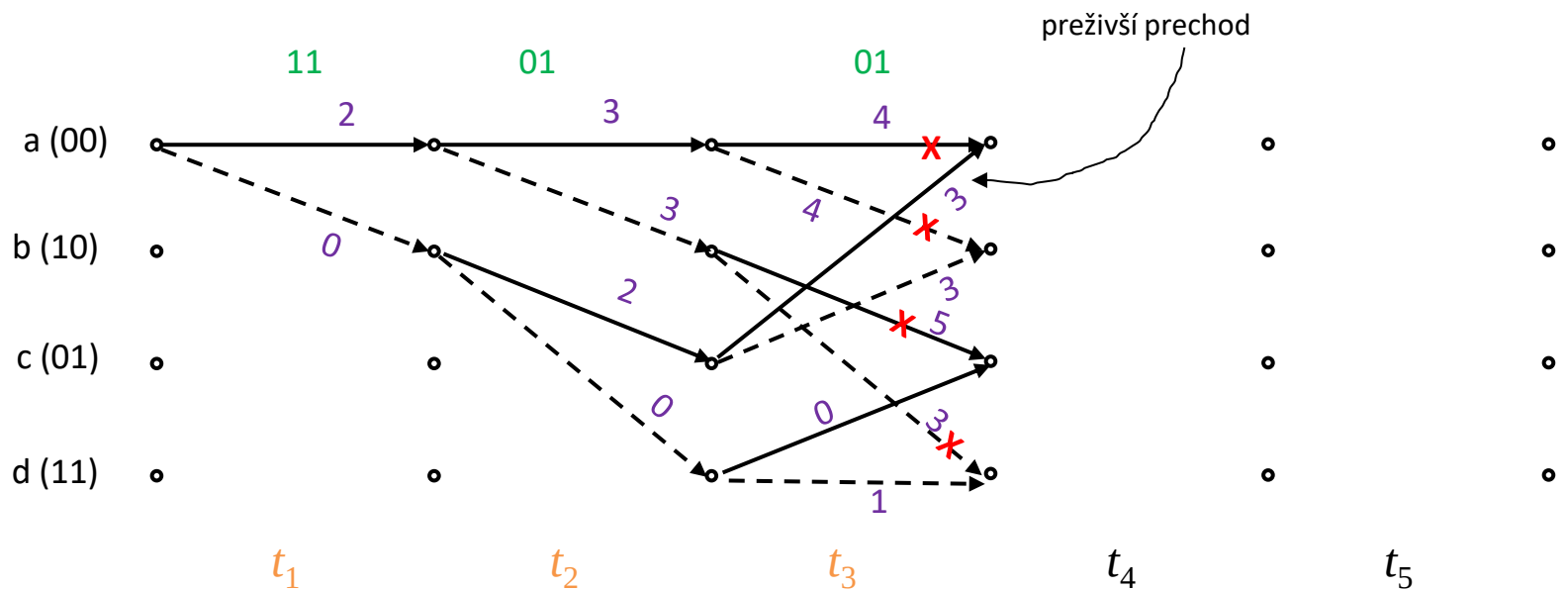


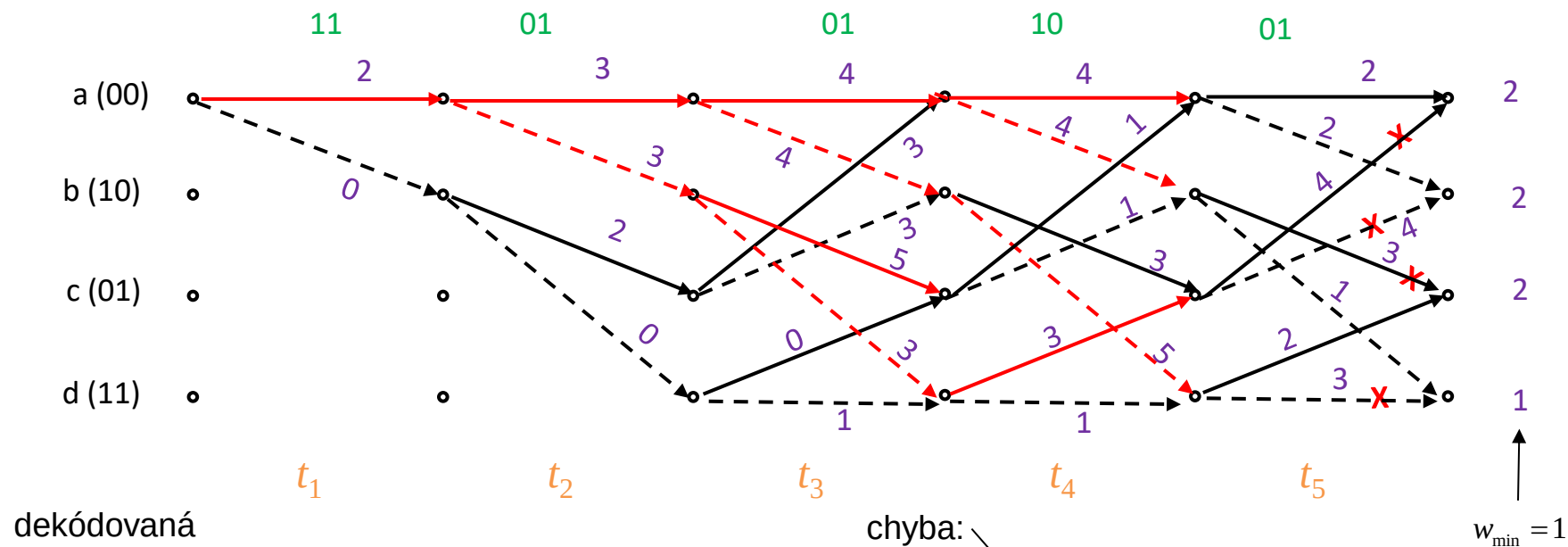
Porovnanie tvrdého a mäkkého dekódovania



Tvrde Viterbiho dekódovanie







dekódovaná
postupnosť: →

11

01

01

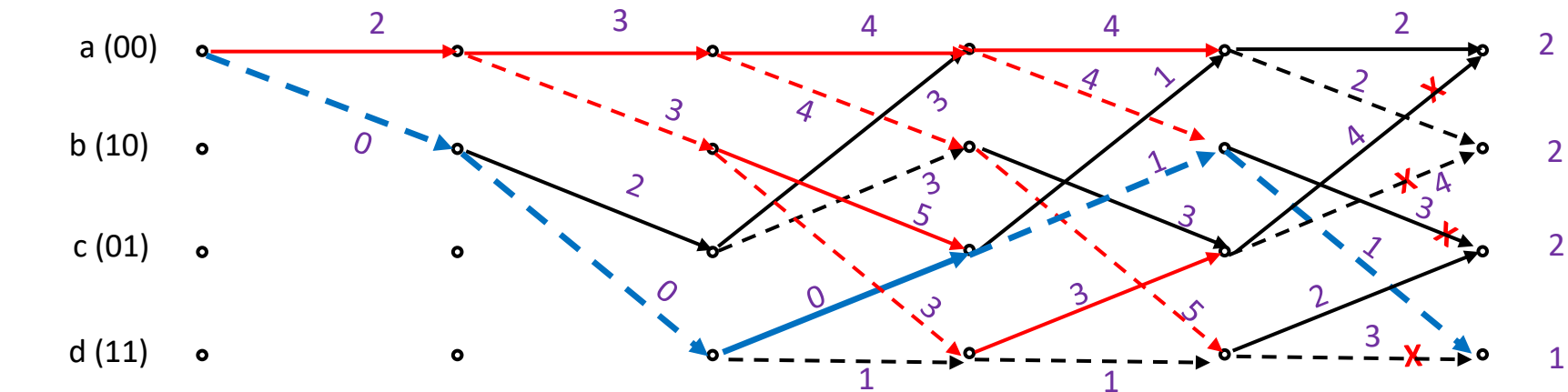
00

01

chyba: →

10

01



dekódované
bity: → 1

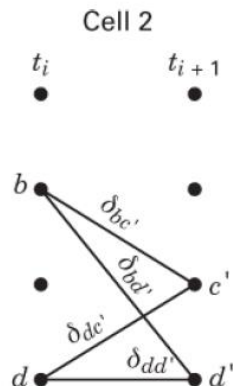
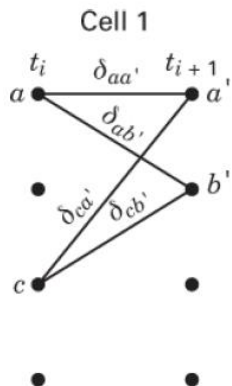
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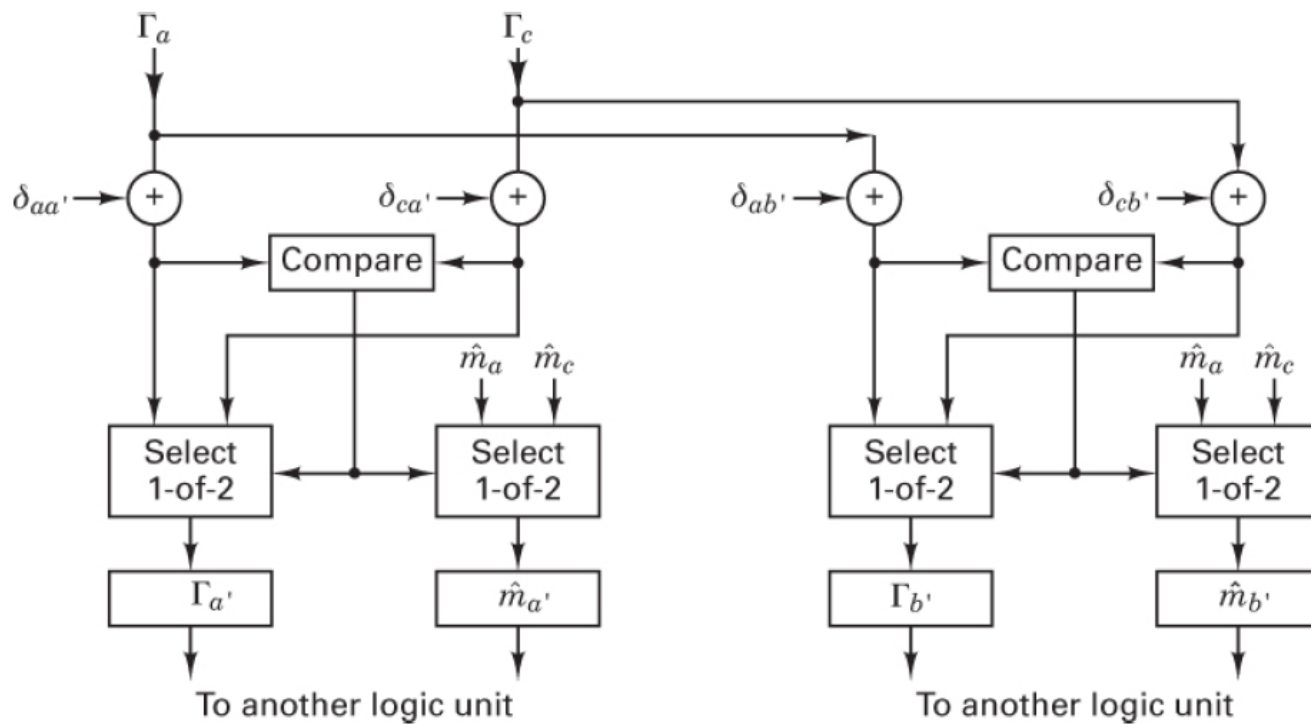
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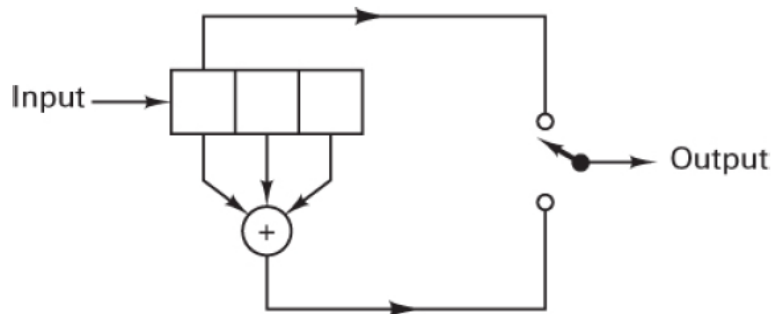
Rozdelenie mriežky na disjunktné bunky



Sčítací a porovnávací obvod realizujúci bunku 1



zdroj: B. Sklar, F. Harris.:
Digital Communications,
Pearson Education, Inc., 2021

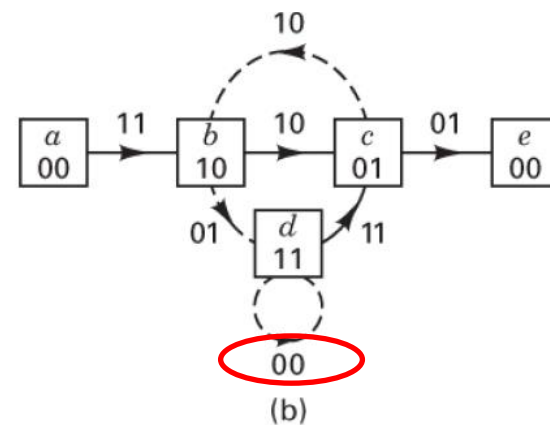
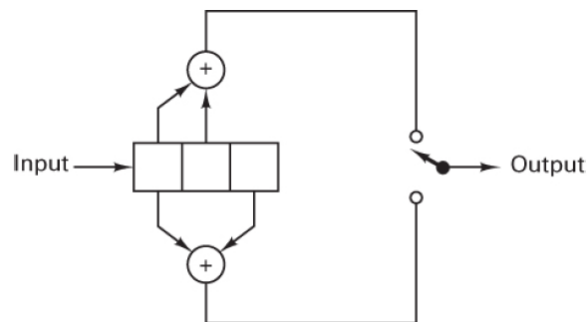


Systematický konvolučný kód

zdroj: B. Sklar, F. Harris.:
Digital Communications,
Pearson Education, Inc., 2021

Pr. $R = 1/2$

K	Syst. d_{free}	Nesyst. d_{free}
2	3	3
3	4	5
4	4	6
5	5	7
6	6	8
7	6	10
8	7	10

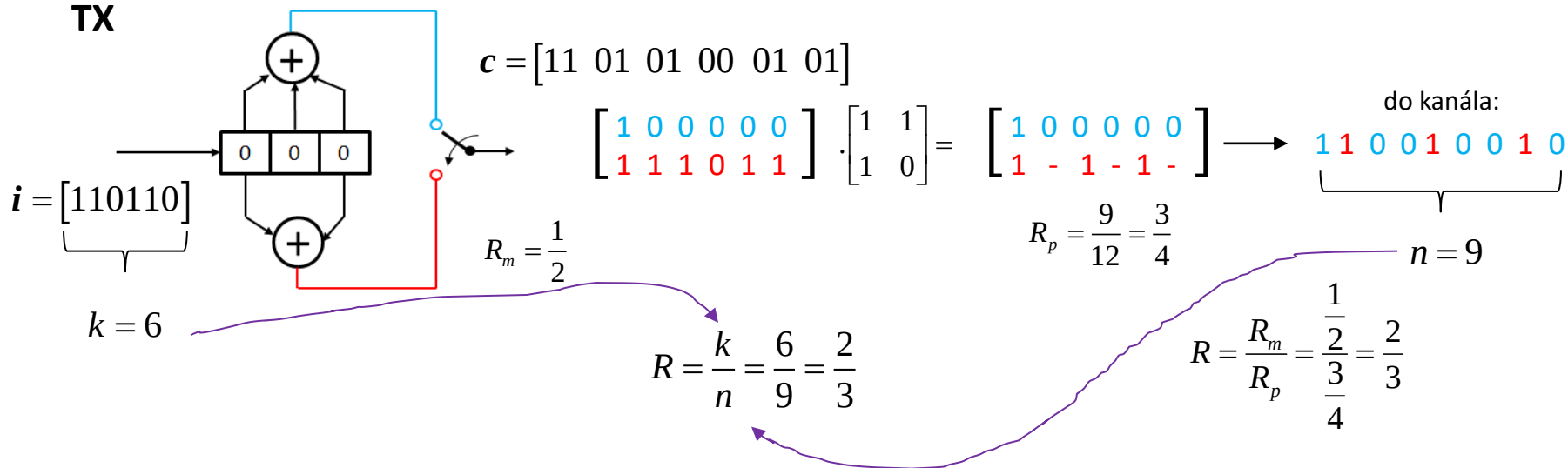


Porovnanie systematických
A nesystematických kódov

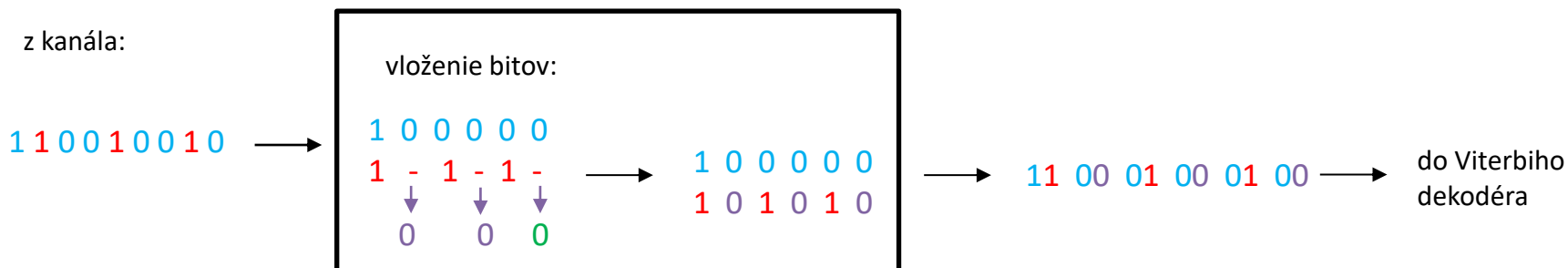
Príklad katastrofického konvolučného kódu

zdroj: B. Sklar, F. Harris.:
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Pearson Education, Inc., 2021

TX



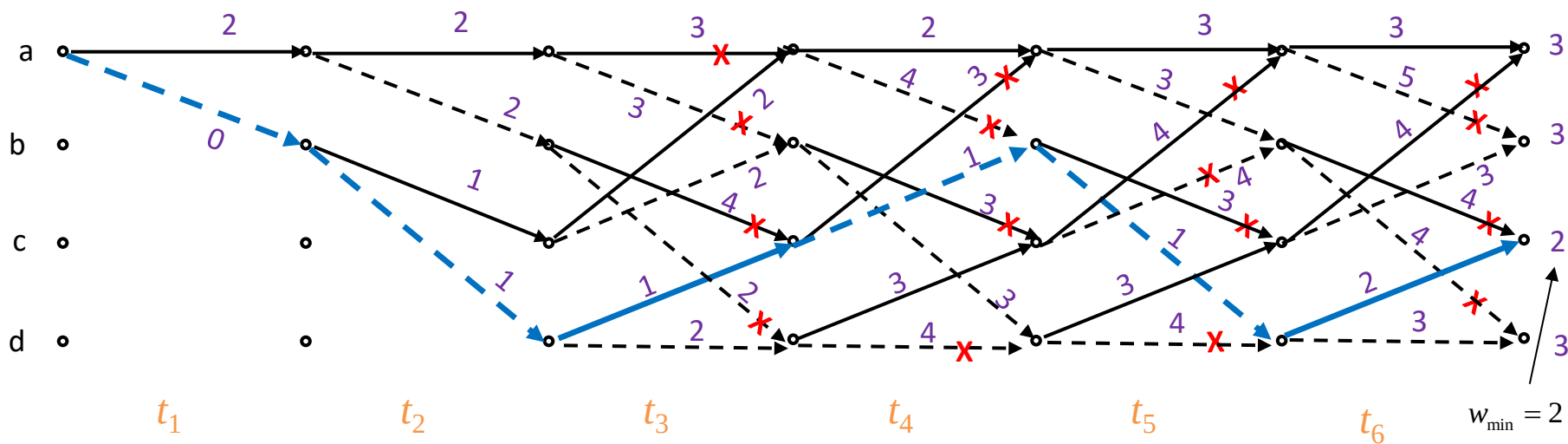
RX



Príklad dierovania

prijatá
postupnosť:

11 00 01 00 01 00



dekódovaná
postupnosť:

11 01 01 00 01 01

dekódované
bity:

1 1 0 1 1 0