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Cc: Arun Ghosh ; Samir Das

Sent: Friday, September 29, 2006 6:42 PM

Subject: Your convention: Fifth Dimension

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M/S Soumya Souvik Hati, Mohar Sen, Debroop Sengupta, Avigyan Bera

Subject: Convention on 12 October, 2006: BESUS to IEST

From: Jyoti R. Sengupta (1954 Civil) ranju@rogers.com

Gentlemen,

Congratulations for arranging a 'convention' to discuss and hopefully, to come to a consensus that to upgrade BESUS into IEST is the only practical and feasible path to future prosperity for our Alma Mater. Once this consensus is reached, I hope that the convention would decide on a plan of action to convince the authorities the justification of upgrading BESUS into IEST. The convention should also delegate the most suitable person or persons to spearhead the action plan. Without this last and very crucial step, it will just be like talking in the wind!

I thank you for inviting me to attend. Please accept my profound apologies for not being able to attend the convention. I am neither an academician nor a politician. But I practised as a Professional Engineer for 45 years in the engineering industry till I retired. I would like to express my views on the basic theme of your convention for whatever it is worth. You may present it at the convention if it adds any value.

A. **WHY NOT LEAVE BESUS AS IT IS?**

1. **Lacks 'Brand Name':** B E College had brand recognition till IIT's gained maturity. Since then, nationally and internationally IIT's are recognized as quality engineering institutions. B E College slipped into second place. BECDU or BESUS have not gained the status of IIT's. Even with massive infusion of funds, it will take years or decades for it to achieve recognition as a premier institution. First of all, the province will not be able to spare such funds. Secondly, other institutions will grab the opportunity for elevating to an INI level with concomitant inflow of funds from the Centre. It will become almost impossible for BESUS to compete with the new INI's to gain equal recognition.
2. **BESUS is a provincial institution:** BESUS is and will remain a provincial institution. It is true that poorly publicized JEE for admission into BESUS are held in some centres in other parts of India. But will the best-qualified aspirants sit for this examination in preference to JEE's for admission into IIT's or the future IEST's with much better infrastructure, funding and brand name recognition? I suspect that the best candidates

from West Bengal will opt for the latter. There will, therefore, be a net brain drain from the province.

3. **Medium of Instruction:** Being a provincial institution, most of the faculty and student body are Bengali speaking. As a result the instructors to better express their thoughts and better comprehension of the student body tend to deliver their lectures in Bengali. Whether we like it or not, English is the predominant language in engineering and science around the world and also in India. Practicing engineers have to address their clients in English during meetings and submit their reports in the same language. Except the few faculty and students who have gone through English medium schools, others have to sharpen their language skills in the classrooms. This does not seem to be happening now. I have noticed with sadness that many of my recent alumni are excellent engineers but are unable to express themselves verbally or in writing in good English. This leaves a poor impression of their true worth as competent engineers. English will truly become a medium of instruction for the ultimate benefit of both the faculty and the students if some non-Bengali speaking faculty and students joins the institution through truly national competitive process.
4. **Funds:** Upgrading BESUS will initially require a massive capital expenditure of Rs. 600 to 900 crores over the next few years. The operating budget has to be maintained at Rs.60 to 90 crores per annum, compared to Rs 15 crores currently available from the provincial government. This magnitude of funding will only be available from the Centre. BESUS must therefore cease to be a provincial university and become an INI (IEST) if it is to extricate itself from the current quagmire and be recognized as a coveted institution, a centre of excellence in engineering education and research.
5. **Politics:** In a democratic society, it is impossible for an institution funded primarily by the government, to remain outside the ambit of influence of the current political party in power. In most cases, the first priority of the party in power is to win the next election. So, catering to the whim of its supporters would normally take precedence over the welfare and improvement of the institutions that are under its purview and control. BESUS was never an exception and neither will it be so in future. Strategically it is advantageous for BESU to become an INI (IEST) under central purview along with other institutions from different provinces of India. The central government will have to forego its own political agenda to avoid conflict with various provinces with different parties in power. Academic agenda put forward by the Council of IEST's would hold sway over partisan politics. While on this topic, I must express my disappointment shared by most alumni, on the recent outbreak of violent confrontation between students owing allegiance to different political parties. An engineering college where students have joined to learn the serious and rigorous profession of engineering is not a forum for political debates leading to violent behaviour. Budding or aspiring politicians should study Political Science or Law and not waste their time and that of other serious students who have come to learn engineering profession. BECSU should focus on improving the infrastructure, libraries, workshops, laboratories, computer facilities, quality of classroom instructions, hostel accommodations etc. which help and aid the students in their studies. They should ban entry of national and provincial political power struggles inside the campus.

B. WHAT ABOUT TRYING SOME VARIATIONS OF THE ANANDAKRISHNAN PROPOSAL?

I have heard some unconfirmed rumours about trying to become a Central University/ continue the same governance model or a modified version of the Anandakrishnan's proposal giving bigger weightage to provincial nominees/ continue the present so-called national JEE conducted by the province etc. If the rumours are indeed true, these are 'red herrings' and are probably just delaying and bargaining tactics to explore if funds can be extracted from the Centre without giving up state control. In my opinion MHRD should not and probably would not acquiesce to such modifications to their proposal. The essence of Anandakrishnan concept of IEST is that the various units will have identical governing model and will be guided by a central body composed of representatives from the various units. This central body will formulate policies on academic and research activities and set guidelines for admission of students and faculty. Their structures will be almost identical. Ranking on their degree of excellence and achievement will depend on the efficiency and vision of the persons running these institutions. Trying to change the model will scuttle the chances of BESUS's admission into this elite group of national institutions.

C. WHY SHOULD BESUS STRIVE TO BE AN IEST?

Anyone who had the patience to read the Anandakrishnan report should have no hesitation to answer this question positively. I will try avoiding what I have stated under item A, but stress on the compelling reasons as to why we must become an IEST to regain our long lost status as a premier institute for engineering education and now get into the realm of serious research projects.

1. **Funds to build modern infrastructure and sustained higher annual operating expenses:** The State government cannot provide this at the levels required to achieve the desired results. Only the Centre can provide it if we become an IEST.
2. **Academic model:** In my opinion, the model proposed in the Anandakrishnan's report is unique and seems superior to other engineering colleges including IIT's. At the entry level, IEST's will offer a combined B. Tech. and M. Tech. course to be completed in five years. They will also offer a 2-year M. Tech course for those who completed just a B. Tech. degree. Most engineering colleges offer a 4-year B. Tech. degree at the entry level. A 2-year M. Tech. after completing B. Tech. is optional. A 5 year course leading to M. Tech., as opposed to a 4+2=6 year course in most colleges, will obviously mean a greater workload in the IEST's. Therefore, only serious students of higher calibre will seek admission into IEST's. Graduates with B. Tech. degrees can enter the engineering workforce at the entry level. However, it is expected that spending just one more year in the college, IEST graduates with M. Tech will be able to enter at a higher level than that reached by B.Tech graduates with one year of experience. IEST's will therefore attract

better calibre students and will be ahead of the game in the workforce over their B. Tech. counterparts. A more serious and academically better student body will also attract higher calibre faculty, resulting in higher quality of education. Once its credentials are established internationally, IEST graduates might get direct admission into PhD programmes at prestigious academic institutions around the world that would normally carry adequate scholarships to sustain the candidates during their studies. This would definitely place them at an advantageous position over their counterparts from other Indian institutions.

3. **Emphasis on Research:** Anandkrishnan Report calls for an emphasis on post graduate and post doctoral researches in engineering and applied sciences at the proposed IEST's. It calls for a large number of scholarships and fellowships to sustain this. This emphasis on research would attract global attention and with its 'brand name' recognition.
4. **Globalization:** The Report specifically calls for admission of overseas students and exchange of faculties at the IEST's. This offers another channel for attaining brand name recognition.

D.SUMMARY

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To summarise:

1. **Status Quo not an option:** In a modern competitive market, with multiple choices available to the consumer, in this case prospective students and faculty, no institution can remain static. It either becomes better and goes up in consumer preference or goes down. Even if it reaches the pinnacle of excellence, it cannot remain complacent. It must continuously improve its standards to avoid being overtaken by the lower ranking institutions. BESUS is now adjudged to be the best candidate to become an IEST. Others will take up our place if we do not seize this opportunity. Even the Central Government has budget constraints. If we lose this opportunity, we might not see another for quite a few decades. By that time, BESUS will reach such a nadir of degeneration that nobody would consider it as a candidate for upgrading!
2. **IEST is the best model:** In my opinion, the academic model of IEST is in many ways superior to the IIT's that we were coveting. If BESUS becomes an IEST, and we keep up the projected standards of excellence, we will leap frog over those considered to be the best institutions in India and attain a position of true eminence.
3. **Governance model and admission criteria an essential part of Anandkrishnan proposal:** I do not believe MHRD will allow any variation of the governance and admission criteria. They are at the very core of the concept. Any tampering with these models will vitiate the entire concept. I am sure, visualizing the ultimate benefit; the other institutions will have no hesitation to accept them without reservations. Our State government and BESUS either accept it in toto or abandon all dreams of regaining the past glory of our Alma Mater and ushering in an engineering institution with potentials to gain an international standard of excellence.

E. WHY ISN'T THERE AN INSTANT ACCEPTANCE OF MHRD PROPOSAL???

Being totally unaware of what actually is happening, what I am expressing below is pure speculation and may not have any bearing on the progress of response to MHRD by the State government. My views should, therefore, be treated as such.

1. I understand and feel that our Hon'ble Chief Minister, Mr. Buddhadeb Bhattacharyya is striving to bring in new and advanced technology and industry into the state. He and other progressive minded leaders of the ruling party obviously realize that conversion of BESUS into an IEST will give a quantum boost to their efforts.
2. Further this conversion and its downstream benefits to the state will be achieved not by spending scarce funds from the state coffers. It will be borne by the Centre. Some other authority spends the money and West Bengal gets the benefit. What better 'win-win' situation can there be? It is analogous to the benefits derived from the Metro Railway. The Centre has built the system and the citizens of Kolkata enjoy the benefit!
3. Is it possible that some parochial and shortsighted members of the ruling party are reluctant to lose 'CONTROL' of BESUS in spite of knowing fully well that such an attitude will relegate the second oldest engineering college in India to a future of perpetual ignominy? 'A dog in the manger' policy??? I have no idea how to bring such elements around and help them see the light. Are there some person or persons who are close to the party in power and are themselves convinced of the advantage for the institution and the State of West Bengal for transformation of BESUS into an IEST approach and convince them?

F. WHAT SHOULD THE PROPOSED CONVENTION ACHIEVE?

1. I expect that the delegates would agree that the conversion of BESUS into an IEST is the best and only available path for BESUS to have a potential of becoming a premier institution for study and research in the field of engineering and applied science.
2. I also expect that the delegates would agree with my logic that MHRD is likely to be inflexible about the prerequisite conditions of governance and admission process.
3. If the delegates agree on items 1 and 2 above, they should formulate a Plan of Action to achieve BESUS-IEST.
4. The delegates should then nominate a team from BECSU to carry out the Plan of Action within a time frame.
5. BECSU should pledge to carry out the required tasks. As I stated earlier, items 3,4 and 5 are the most important steps. If they are not accomplished then holding the convention would have no tangible result.

Once again, please accept my apologies for not being able to participate in your convention. I applaud your efforts and wish you the best of luck. The entire alumni community is looking up to you to achieve the desired goal for the betterment of our beloved Alma Mater.